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ABSTRACT

This volume deals specifically with needs assessment as a systematic effort to understand the educational needs and interests of adults. It is introduced by Lynn G. Johnson, who provides an overview of resources and issues in needs assessment and summarizes briefly the papers which follow. In Part 1, K. Patricia Cross describes the kinds of studies which have been conducted by educational providers, policy-making bodies, and researchers; and summarizes generalizations about adult learners that are well established, the common failings and limitations of assessment studies, and suggestions for future research. Part 2 describes four needs assessment models: (1) a survey by Felissa L. Cohen on the need for a nursing baccalaureate degree completion program in Illinois; (2) an assessment of the needs of adult women returning to college in Springfield, Massachusetts, by Ruth S. McClain; (3) an assessment of the needs of low-income inner-city residents in Oakland, California, by Margorie Griffin Murray; and (4) a comprehensive study of adults in upstate New York by Helen C. Veres. In Part 3, Floyd Pennington gives practical how-to advice on conducting needs assessments, while David R. Greer provides an annotated bibliography on needs assessment in part 4. This volume is the first in a series of studies designed to identify new needs and directions in lifelong learning. (KC)

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OHIO BOARD OF REGENTS

Assessing the Needs of Adult Learners: Methods and Models

Edited by Lynn G. Johnson

Marketing Studies Series, Vol. I
Advisory Committee on Lifelong Learning
Ohio Board of Regents

August 1980

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Volume I.

Marketing Studies Series

Assessing the Needs of Adult Learners: Methods and Models

This volume is the first in a series of studies designed to identify new needs and directions in lifelong learning.

This series of publications was commissioned by the Ohio Board of Regents' Advisory Committee on Lifelong Learning and supported by a grant under Title I of the Higher Education Act. The studies in this series are concerned with "marketing" in the sense of identifying changing educational needs and emerging ways in which institutions of higher education are serving such needs, particularly with reference to adult learners.

Volume I deals specifically with Needs Assessment as a systematic effort to understand the educational needs and interests of adults. Several of the papers included herein were presented at a conference sponsored by the Regents' Advisory Committee on Lifelong Learning and held on April 26-27, 1979 at the University of Akron.

The papers were edited by Lynn G. Johnson, Program Director for Lifelong Learning, Ohio Board of Regents. Assistance in preparing the final manuscript was provided by Anne Bostwick, David Greer, and William Lowers.

Ohio Board of Regents

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Editor's Introduction

Lynn G. Johnson

Resources and Issues in Needs Assessment

Lynn G. Johnson

Editor's Introduction: Resources and Issues in Needs Assessment

"Needs assessment" as used in this volume refers to the systematic effort to understand the educational needs and interests of adult students.1

The phenomenal growth of adult participation in learning activities of all kinds means that adult learning is important to a wide range of agencies and institutions. In today's "Learning Society" needs assessment is no longer the sole province of researchers in adult and continuing education.

For public agencies, reliable information on patterns of adult learning provides vital data for planning and policy-making. For colleges and universities, knowledge of adult learners' characteristics and educational requirements is critical for the process of adapting to an increasingly diverse student body. For educational providers of all kinds, information about adult learners is indispensable for developing and marketing their programs.

Identifying Assessment Expertise

An investigation into the state of the art in needs assessment generated the papers which are collected in this volume. Such an investigation was undertaken early in 1979 by the Office of Lifelong Learning of the Ohio Board of Regents. Like other state coordinating agencies, the Board of Regents recognized the need for better data on adult learners and was interested in national developments in this field.

Accordingly, the Regents' administration resolved to bring together whatever expertise could be identified nationally to participate in a conference on assessing adult learning needs. It was determined initially that the best source of assistance would undoubtedly come from persons across the country who had themselves successfully carried out assessments for agency or institutional purposes.

Thus was born the idea of a national competition, the "Regents' National Competition on Assessing the Needs of Adult Learners," as a means of identifying exemplary assessment models and sharing those experiences with faculty members and administrators wrestling for the first time with the practical problems of assessment.

The Regents' National Competition

In soliciting papers, the Board of Regents asked applicants to describe assessment activities from conceptualization through utilization, with enough detail on sampling, instrumentation, and similar matters to facilitate adaptation by interested readers. The Board also looked for evidence that an assessment project had produced reliable information upon which action could be taken.

Four categories of competition were announced by the Regents: (1) two-year community and technical colleges; (2) state colleges and universities; (3) private colleges and universities; and (4) other higher education organizations. Entries in each category submitted by institutions and agencies in 15 different states and Canada were rated by a panel of readers on the basis of "readability, reliability, and relevance."

The winning papers in each category (presented in Part II of this volume) are:

A. Two-Year Community and Technical Colleges
Ruth S. McClain
Springfield Technical Community College
Springfield, Massachusetts

"An Assessment of Needs of Adult Women Returning to Higher Education at Springfield Technical Community College."

B. State Colleges and Universities
Felissa L. Cohen
University of Illinois
Champagne-Urbana, Illinois

"Assessment of Need for a Baccalaureate Completion Program in Nursing at Illinois State University."

C. Private Colleges and Universities
Marjorie Griffin Murray
Holy Names College
Oakland, California

"The Unknown Citizens: Adult Learners in the Inner City."

Lynn G. Johnson, formerly with the Ohio Board of Regents, is Assistant Provost, University of Akron.

D. Other Higher Education Organizations
Helen C. Veres, Joseph Mangano, and Gerald Freeborne
New York State Department of Education
Albany, New York

"Information and Involvement: The New York State Continuing Education Needs Assessment."

The Ohio Conference on Needs Assessment

These successful authors were invited to present their work at the Ohio Board of Regents' Conference on Assessing Adult Learning Needs, which was held at the University of Akron on April 26 and 27, 1979. Two persons of national prominence in the field of Lifelong Learning were also featured speakers: Dr. Arlon E. Elser, Program Director at the W.K. Kellogg Foundation, and Dr. K. Patricia Cross, Professor of Higher Education at the University of California, Berkeley, and Distinguished Research Scientist of the Educational Testing Service.

The Akron Conference, attended by 130 persons from Ohio and several other states, was designed to provide a general overview of needs assessment as well as specific information on assessment methodology. Arlon Esler, the opening speaker, suggested that the broader context of needs assessment is the necessity for academic institutions to become more immersed in their communities.

Noting that the center of gravity as regards learning activity has in fact already shifted to non-institutional settings, Elser stated that the lifelong learning movement can help to re-establish the legitimacy of higher education in today's society. According to Elser, however, this will only occur if institutions reassess their role in terms of community needs and the competencies they can demonstrate upon completion of courses and degree programs.

The State of the Art in Needs Assessment

The second conference speaker, K. Patricia Cross, shared the results of her recent research on needs assessments. Having reviewed a large number of assessment studies done in recent years, Cross characterized needs assessment as more of an art than a science.

The Cross paper on the "State of the Art in Needs Assessments," reproduced in its entirety as Part I of this volume, describes the kinds of studies which have been conducted by educational providers, policy-making bodies, and researchers. In this article, Cross summarizes much of what she has written on at greater length elsewhere: those generalizations about adult learners which are now well-established by repeated investigations; the common failings and limitations of assessment studies; and suggestions for future research.

Cross also offers some sound advice for persons planning to undertake an assessment project. While research design is important, more attention should be paid to data analysis and interpretation than is typically the case. Above all, the choice among possible methodologies must be guided by the kind of information desired and the proposed use of the data.

Four Assessment Models

The four winning papers which constitute Part II of this collection were described by the authors themselves in concurrent sessions at the Akron Conference.

Felissa L. Cohen conducted a survey for Illinois State University and the Illinois Board of Higher Education of over 1100 registered nurses in Central Illinois in order to determine the need for a baccalaureate degree completion program. Cohen's methodology also included interviews with nursing school seniors, health care clients, and area employers.

Ruth S. McClain described her assessment of the needs of adult women returning to college in Springfield, Massachusetts. McClain's research involved mailed questionnaires and a telephone survey of nearly 700 women. The responses of non-persisters—those who had enrolled but subsequently dropped out—were compared with those of current enrollees and graduates.

Marjorie Griffin Murray's assessment of the needs of low-income residents in the inner-city area of Oakland, California entailed an interactive process utilizing community-based organizations. Agency cooperation, the use of volunteers, and learner participation all contributed to the development of programs which successfully involved disadvantaged and previously underserved adults.

In upstate New York, Helen C. Veres and her colleagues coordinated a comprehensive study of adults aged 25 and over. Approximately 20,000 subjects were personally interviewed. A key element in the survey design was the cooperation among educational institutions and regional planning agencies. This collaboration facilitated subsequent utilization of the findings and implementation of new programs.

In these four papers the reader will find much helpful information about the "nuts and bolts" of carrying out assessment projects.

Practical Guidelines for Conducting Assessments

After the conference papers had been assembled, the suggestion was made that this volume might be enhanced by an additional article which would synthesize some of the major features of these and other studies and abstract a number of basic guidelines for implemention.[2]

Floyd Pennington of the University of Michigan was commissioned for this task. His paper, presented in Part III, addresses a number of practical considerations in conducting needs assessments: establishing the rationale for a needs study; characteristics and benefits of needs assessments; general guidelines for implementation; and specific steps to be followed in carrying out a needs assessment.

The Pennington paper will be of particular interest to persons who are considering or are about to initiate an assessment of adult learning needs.

Readings on Needs Assessment

There is also, of course, a wealth of information about assessing adult learning needs in the substantial body of literature on the subject.

Part IV of this volume consists of an Annotated Bibliography of readings on needs assessment. Brief descriptions of other eligible entries in the Ohio Board of Regents' National Competition are included in the Bibliography along with notes on other works of interest. David R. Greer authored this bibliographical material.

Other Resources for Needs Assessment

Perhaps the most striking aspect of current efforts in assessing adult learning needs is the tremendous diversity one observes in the subjects, methodological approaches, and sponsorship of assessment studies. In addition to samples of the general adult population, subject groups include members of various professional fields; employees of businesses, unions, and other organizations; women; older adults; and many others. Current students, graduates, and drop-outs are also frequent subjects as well as other adults not currently enrolled in academic programs.

Among the methodologies employed, one finds face-to-face and telephone interviews, questionnaires, community meetings, and discussions with employer or other organizations. The American Association of Community and Junior Colleges has recently inaugurated a series of public hearings to gather information on the educational interests and concerns of citizens across the country.[3] The recently-published College Board publication entitled *350 Ways Colleges are Serving Adult Learners* lists no less than 30 practical approaches to needs assessment.

Finally, assessment studies are being conducted by a wide range of sponsors, including academic departments, divisions of continuing education, institutional research offices, local and regional consortia, governmental agencies, and a host of others.

Examples of these diverse assessment activities may be found in virtually every community. The persons who directed them and the data they have produced represent potentially valuable resources for program planners and policy-makers alike.

Limitations of Needs Assessment Studies

Nevertheless, as the Cross paper suggests, a knowledge of the limitations of existing assessment research can help both in the interpretation of published data and in the conduct of future research.

Besides the purely descriptive rather than analytical nature of many studies, other common shortcomings—ambiguities surrounding the concept of need and the intrusion of sponsor bias, for example—have contributed to skepticism in some circles about the value of needs assessments. Educational providers have in some cases been troubled by the costs of assessment projects and by the absence of clear indicators for future programming. Agency administrators have not always found the kind of incontrovertible documentation for public funding which some had hoped for.

These persistent problems, however, do not justify the conclusion of some that needs assessment has seen its day and ought to be laid quietly to rest. Indeed, quite the reverse may be the case. What is more likely is the probability that as a planning tool needs assessment is only now coming into its own. With increasing advances in the state of the art and growing sophistication with respect to its utilization, needs assessment may in fact come to be regarded as an indispensable aid to those who work with adult learners.

Future Directions in Needs Assessment

The future development of needs assessment may be assisted by a better understanding of the ways in which research technique, information dissemination, institutional adaptation, and advocacy relate to assessment studies.

(1) *Research Technique*. Even an elementary knowledge of how to select the most appropriate research approach can help institutions to obtain better information on subject-matter interests, planning agencies to find out more about underserved groups, and researchers to zero in on motivational factors in adult learning.

That such knowledge is now available, and that the methodological inadequacies and fallacies of interpretation in many earlier studies are no longer unavoidable, is argued convincingly by K. Patricia Cross, whose paper represents a kind of prolegomena to any future needs assessment.

(2) *Information Dissemination*. Until recently few people were asking the kinds of questions which needs assessments attempt to answer—a fact which undoubtedly explains the slow evolution of assessment as a planning tool. The precise ways in which adults differ from younger students and the specific requirements for new programs and services appropriate to adult clientele are still not well known to a great majority of those who administer and teach in colleges and universities.

Since increased knowledge tends to stimulate the quest for new insights, however, it can be safely predicted that the dissemination of data produced by improved assessment studies will in turn generate increased interest in this kind of information. This acceleration effect is in fact already apparent in the increasing interest in information about adult learning.

(3) *Institutional Adaptation*. Needs assessment is also related to what Kotler (1975) has called a "marketing orientation" or a "consumer needs orientation."[4] Assessments in the past have generally been conducted by those program units, institutions, and agencies most concerned with the learning requirements of adults. Improvements in future assessment efforts are likely to be similarly spurred by the growing willingness on the part of academic institutions to

adapt programs to new clientele. Needs assessment may thus be viewed as part of a larger process, a process of becoming responsive and adaptive to community needs.

(4) *Advocacy.* Meanwhile it is a fundamental error to assume that needs assessment is a substitute for advocacy. Confusion often arises on this point because descriptions of "needs" are often thought to imply the necessity for certain actions. While assessment data can be an invaluable aid to policy-makers and program developers, it cannot in itself tell one what ought to be done.

The desirability of allocating resources for lifelong learning must still be argued out in terms of institutional mission and public policy.

This is a political process, and as such requires political strategies, not merely technical ones. Advocates of lifelong learning must use information about needs to help make their case rather than expecting the data to do the job for them. In this connection, however, it is important to note that it is the adult learners' sense of what needs are paramount, and not merely the prescriptive views of educators, which ought to determine priorities.

Notes

1. A penetrating analysis of the concept of "educational need" has been produced by Monnette (1977). This author discerns four meanings of need in the literature: basic human needs, felt and expressed needs, normative needs, and comparative needs. Acknowledging Knowles' (1970) observation that needs may apply to individuals, organizations, and society, he endorses a typology of three diagnostic models suggested by John McKinley: Individual Self-Fulfillment Models, Individual Appraisal Models, and System Discrepancy Models (see Monnette, 1977: 119-120). Monnette also argues that while "needs" may be described by empirical data, they can only be defined as such by specifying some standard, norm, or valued state of affairs.

2. For this suggestion and others on the subject of needs assessment, I am indebted to Rexford Moon, Director of Future Directions for a Learning Society, a program of the College Board.

3. Based on correspondence with Jamison Gilder, Director, Policies for Lifelong Education, a project of the American Association for Community and Junior Colleges.

4. Kotler (1975:10) describes a "marketing orientation" or "consumer needs orientation" as essentially "an attitude on the part of administrators and employees that their job is to understand their clients' needs and to satisfy them." Classifying organizations according to the extent to which they are responsive to their clients, he characterizes "the responsive organization" as one which formally audits at regular intervals the needs, perceptions, preferences, and satisfactions of its constituent publics (p. 43). The responsive organization, according to Kotler, is one which internalizes the market orientation by attaching a high priority to research and analysis of consumer needs and making such information the focus of its planning.

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Part I

K. Patricia Cross

The State of the Art in Needs Assessments

K. Patricia Cross

The State of the Art in Needs Assessments

Needs assessments are, to put it mildly, "in" these days. Almost every planning office, whether statewide or institutional, has done one, will do one, or is thinking about doing one. It is a perfect time for those in the planning or thinking stages to profit from both the knowledge and mistakes made by those who went before you. For certainly they left a fascinating trail of information about the educational needs and interests of adults, plus some valuable insights about the dos and don'ts of needs assessments.

My task is to extract, from some 40 major studies that have been done over the past five years, some of the highlights about both the process and the products of needs assessments. We have probably learned more *about* needs assessments than *from* them, but so far I, at least, have given more attention in papers and speeches to what we know about adult learners and their needs (Cross, 1978a, b; Cross and Zusman, 1979) than to what we know about needs assessors and their needs (Cross, 1979b). This conference gives me an opportunity to right the balance.

Three Purposes for Needs Assessment

It is something of an oversimplification, but basically those who conduct needs assessments do so for one of three reasons. First, there are the providers of educational programs and services. They are usually found in the administrative offices of colleges and universities, and their purpose in conducting a needs assessment is to gauge the size and interest of the potential market for their services. Some providers are frankly seeking to identify new adult markets to fill the seats left vacant by the diminishing 18-24 year old student population. Others have identified a prospective target group, such as reentry women or the elderly and are attempting to determine the needs of that group. In any event, providers of educational programs generally conduct needs assessments that are closely akin to market surveys—i.e., questionnaires or interviews to determine what people want.

The second purpose of needs assessors is illustrated by those who are responsible for public policies and educational planning. These needs assessors are usually found in the offices of state and federal agencies and sometimes in colleges with a specific mission or desire to serve the needs of the community. Their purpose in conducting a needs assessment is to see that all segments of the population have fair and equal opportunities to participate in educational programs that best meet their needs. Their needs assessments are more like policy studies than marketing surveys.

Finally, there are researchers who get into needs assessments because they are interested in knowledge and in understanding adults and their attitudes and interests regarding further learning. They are usually found in university departments of psychology, sociology, gerontology, education, and in other research organizations. Researchers can be subdivided almost endlessly according to discipline, methodology, theory, and the like, but those involved in needs assessments are primarily interested in describing the attitudes and self-perceptions of the respondents. Some attempt to relate these measures to various hypotheses or theories about the education of adults; others content themselves with descriptive studies. Their needs assessments are more like survey research than like market analyses or policy studies.

These three categories are not mutually exclusive; indeed most needs assessments have elements of all three purposes in them. Ultimately, the single over-arching purpose that we hope pervades all reasons for conducting needs assessments is to discern the educational needs of potential students so that we may serve them better, and through them, better meet the learning needs of our collective society. Nevertheless, a needs assessment designed for one purpose is not maximally effective when it is modeled after a needs assessment designed to accomplish some other purpose.

Defining Information Needs

Let me give a concrete example of the simple differences in information needs between a provider of educational services and a state planner charged with securing equal educational opportunities for all citizens. Of the 40 major needs assessments that I have reviewed (Cross, 1979a), I

K. Patricia Cross is Distinguished Research Scientist at the Educational Testing Service in Berkeley, California.
This paper was presented at the Conference on Assessing The Needs of Adult Learners, University of Akron, April 27, 1979.

can't think of one that failed to analyze responses by sex, and I can think of only one that used subject matter interest as the independent variable. From the perspective of the state planner, it is important to have a profile of women's interests and participation in various kinds of learning opportunities. Offices charged with public trust have an obligation to assess needs by race, sex, age, family income, educational attainment, and any other variable that is known to play a significant role in educational opportunity. But from the perspective of the provider of educational programs, these exceedingly common demographic descriptors may not be as useful as data arrayed so as to provide a profile of adults who express an interest in a particular course of study.

If, for example, I am the dean of Podunk College, and I want to know the potential market for an introductory course in child development, it would be nice to have the needs and interest profile of all those expressing interest in child develoment. Who are they? Where do they live? Do they have children? How old are they? How many are single parents? Are they professional, clerical, or blue collar workers? How do they find out about adult educational opportunities? Do they subscribe to a daily newspaper? Which one? What do they read in it? Do they watch television? Have they ever taken a course in adult education? Where? What worries them about raising children today? What is important to them in the learning environment? Do they want an exchange of experiences with other parents or lectures from an authority figure? What kind of schedules do they need? The list of important questions about a group of people who might meet together to pursue a common interest is seemingly endless; but the needs assessment that provides a profile of people who share a common subject matter interest is rare indeed. The best our aspiring program planner can do is to observe from the myriad of surveys that offer profiles by sex, race, and age that women are more interested in child development than men, that there is no difference among the races, and that people in their 30s are more interested than those in their 60s in taking a course in child development. That is not very adequate information for the needs assessor whose major interest lies in planning and marketing educational services.

If the assessor in this example had designed and analyzed a survey more suited to his needs, he could have obtained information that helped determine how the course should be structured, how and where it should be advertised to reach the target population, when and where it should be offered to provide convenience to the largest number of potential students, what auxiliary services would be required by students, and what other courses they might take concurrently or once they had tried child development. He could do all this with very little additional expense and still have all the information that is required to offer equal educational opportunity.

The point is that all too many people conducting needs assessments these days take a questionnaire or interview schedule that has been designed by researchers, modify it a little, analyze the data in standard categories such as age, sex and race, duly report the results, and only then begin to wonder what to do with the information.

The time to worry about implementation is at the beginning rather than the end of the data collection. One question that should be asked of each item in the needs assessment is, What would we do differently if we knew how potential learners respond to this question? Let us suppose, for example, that from a standard needs assessment, you find out that women are more likely than men to favor daytime schedules. Unless you are planning a program for women or wish to assess how well the needs of women are currently served, that is a fairly useless bit of information. What the provider really wants to know is, What are the needs and interests of people who prefer daytime schedules? Such information leads directly to planning a daytime schedule of courses and services that meet the needs of an identifiable group of learners--most of whom could be women, but increasingly are more likely to be older people of both sexes.

This particular example illustrates the failure of Category I needs assessors, i.e., the providers of educational services, to define their own needs for information before embarking upon the more technical task of assessing the needs of learners. In this case, the common error is to present learner profiles in demographically convenient categories instead of in educationally relevant categories such as subject matter interest, educational goals, scheduling needs, or preferred instructional formats.

Targeting Needs Assessments

The state of the art is considerably more advanced for Category II needs assessors, i.e., state planning officers. I think it is fair to say that after five years of intensive activity, we have a very good baseline of knowledge about which population groups are served well and which are served poorly by existing adult educational opportunities. We know how women differ as a group from men in their educational needs and interests, how high school graduates differ from college graduates, how 70 year olds differ from 30 year olds. There is no evidence that such differences are regionally unique, and little is to be gained from further needs assessments patterned after the state studies already available. The need now on the part of state planning offices is for more targeted studies about groups shown to be educationally disadvantaged. The groups shown to be underrepresented in virtually all of the existing studies are these: Ethnic minorities, the elderly, people with less than a high school education, rural populations, and those with annual incomes of less than $8,000 (Cross, 1979a).

I won't go into any detailed analysis of the progress of Category III needs assessors except to observe that researchers interested in extending the frontiers of knowledge have not yet capitalized on the opportunity to relate findings from the needs assessments to any existing body of knowledge or theory about adult learning and motivation.

In sum, my assessment of the state of the art is that so far needs assessments are batting about one out of three in making good use of the data collected. I say "making good use of the data collected" because in many cases the things people worry about in needs assessments, such as

the representativeness of the sample or the design of the interview, are given far more attention than the analysis and interpretation of the responses. We have spent considerably more time and money collecting the data than interpreting and using it. I will say more about interpretation and use later, but first I want to spend some time this morning talking about what we know from the needs assessments that have been conducted so far. Along the way I shall attempt to point out what we could have known and what we have learned in general about the state of the art in needs assessments.

We know a great deal about the characteristics of the current participants in adult education and about what people say they want in the way of adult learning opportunities. We know it from the Triennial Surveys conducted in 1969, 1972, and 1975 and analyzed and distributed by the National Center for Education Statistics (Okes, 1971; Okes, 1976; Boaz, 1978). We also have good information from two national survey research studies, one done by Johnstone and Rivera in 1961-62 at the National Opinion Research Center and one done a decade later by my colleagues at Educational Testing Service (Carp, Peterson, and Roelfs, 1974). Finally, we have good data from some 40 state and regional studies, most of them conducted between 1975 and 1978 (Cross, 1978a; Cross, 1979a; Cross and Zusman, 1979).

Educational Level and Participation

Our heritage from the substantial amount of investment of time and talent in needs assessments is that we know what we can know from these particular models almost beyond a shadow of a doubt—which is a strange and wonderful thing to say about any knowledge in the social sciences these days. The reason I dare to make such an assertion is that some findings are replicated in virtually every study regardless of the sample or the methods of data collection. If you were to survey any reasonable representative sample of the adults in your community, I could predict with high accuracy the results of certain aspects of your needs assessment before you conducted it. I know of no study, for example, that has reported any data to contradict the assertions that the more education people have, the more they want and the more they are likely to participate in available opportunities. Level of educational attainment is one of the best predictors of both interest and participation in future learning activities. A high school graduate is about twice as likely to continue learning as an adult with an elementary school education, and a college graduate about twice as likely as a high school graduate to be a participant in adult learning activities (Carp, Peterson, and Roelfs, 1974; Boaz, 1978; Cross, 1979a).

The policy implications in the consistency of these findings are profound because it means that it is the already well-educated who are seeking further educational opportunities, and it probably means that as more opportunities become available, it is the well-educated who will have the motivation, background, money, and information networks to take advantage of further education. The poorly educated, whom policy makers and many educators would most like to reach, will fall farther and farther behind. Given the inevitability of that conclusion—at least under prevailing conditions—it would be a contribution for someone to forgo yet one more reverification of the troublesome finding that there is a positive correlation between educational attainment and adult participation and devote more in-depth attention to the needs and motivations of adults with a high school education or less. Many of these potential learners have had poor experiences with school in the past, which is no doubt why they left school early and are reluctant to return. How accurate are their perceptions of educational opportunity for adults today? Some, we know, cite the cost of education as a problem, yet there is more than a hint in the data that few have been sufficiently interested in further education to find out about cost. Do adults with a high school diploma, for example, know that in any community they can study almost anything they could think of studying, from soapstone carving to Shakespeare for less than $20 a term, and many subjects for nothing? A good needs assessment should provide more than a description of what people say they want; it should give some clue about how much they know about existing opportunities and how we might go about reaching them with more appropriate opportunities and better information.

Older Learners

A second universal finding of the studies conducted to date is that interest and participation in adult learning decrease with increasing age. Participation starts to decline as people approach the age of 40 and drops off sharply after age 55 (Cross, 1979a). A 30 year old, for example, is about four times as likely to be engaged in some form of adult learning activity as a 60 year old (Boaz, 1978). It is clear that today's learning force is dominated by young, well-educated adults, with good incomes and good jobs.

There is, abroad in the land, the powerful conviction that education is a "capital investment" and that such an investment is justified only when there are enough years remaining in life to reap a monetary return on the investment. The primary reason given by older people (65 and older) for their lack of interest in further learning is that they are "too old" (Hefferlin, Peterson, and Roelfs, 1975; Hoyt, 1975; Cross 1979a). At first blush, one might think that the elderly feel that their minds are too old to grasp new ideas or their bodies too weak to make the effort. But few cite health as a primary deterrent, and while some lack confidence in their ability to compete (which correctly or incorrectly, they perceive as a necessary evil of educational participation), many older people simply fail to see that education, as they know it—or knew it—has anything to offer them (Kovenock, 1978).

Yet as we look to the future, one of the most interesting and one of the most essential markets for adult learning activity is the escalating number of older persons. Everyday approximately 4,000 Americans turn 65, a figure that will double just after the turn of the century. Projections indicate that the total population in the United States will grow by about 57 percent between 1970 and 2050, but for those 65 and older, the growth rate will be 145 percent.

The interesting potential of the elderly as a learning market, offering opportunity as well as responsibility to educators, is that they are a distinctive subgroup of the population that do not offer one of the two major barriers to continuing education that show up in virtually every needs assessment.

"Lack of time" and the *"cost of education"* usually vie for first and second place as major deterrents to adult education (Cross, 1979a). Time for learning is not often cited by older persons as a problem, nor despite their low and fixed incomes, is cost. Cost is much more frequently perceived as a problem by young people, and lack of time is the seemingly universal problem for those in their 30s and 40s who have young families to support and careers to advance. For older people, the chief deterrent to their participation in adult learning activities seems to be a failure to perceive that education has anything to offer that would be useful at their stage of life.

What is Versus What Might Be

This brings me to one of the major problems that has rarely been discussed openly midst the current fervor to conduct needs assessments as a basis for educational planning. Needs assessments are necessarily based on the current perceptions and understandings of the respondents. They are better at telling what is than what might be.

Suppose General Electric had set out 50 years ago to conduct a survey of what customers said they wanted in the way of improved methods for the preservation of food. I would guess that their needs assessments would have shown that the major demand was for cheaper ice for their ice boxes and perhaps for more frequent and more reliable delivery of ice. There would have been no demand for an electric refrigerator because the average consumer had no notion of what a refrigerator was or how it could work. Moreover, the experience of people with frozen foods was limited to spoilage by freezing; there was no frozen food technology, and the progressive salesman with frozen food for sale would have been laughed out of town. It was only after the electric refrigerator was invented by someone who saw a need not recognized by consumers that a refrigerator became a near-universal need.

Needs assessments have had difficulty introducing new concepts and new ideas to respondents. Most new services dreamed up by imaginative educators have not reached an impressive demand count in the needs assessments. This results in the general conclusion that adults are rather conservative in their educational demands and would prefer not to try anything new. There is good experiential evidence, however, that adults *are* looking for new kinds of educational experiences, but like the refrigerator, such innovations are more *likely to be recognized when they appear* than to be demanded in the abstract.

We have a good example now of the failure of needs assessments to predict the success of the *Elderhostel* program. Elderhostel is a consortium of colleges offering week-long mini-courses in the summer to older people. Students live in the dormitories, eat in the cafeteria, and take college level courses taught by college professors.

Almost everything in the descriptive needs assessment that is the prototype today would have argued against the success of Elderhostel. In the first place, the data show clearly and consistently that people over the age of 55 constitute the poorest market of all age groups for educational programs. Thus, no educational marketer up on the latest information from needs assessments would set out to tap the least likely market. Secondly, one of the most common barriers to educational involvement for older people is problems with transportation to the campus. What madness then to devise Elderhostel that is heavily dependent on getting older people to travel, not just across town, but hundreds and even thousands of miles to a college campus. Thirdly, college courses taught by college professors rank near the bottom of all types of learning experiences desired by older people. Most needs assessments show arts and crafts to be the preferred subjects of the elderly, and socially interactive formats are generally preferred over lectures. Finally, although the cost of the Elderhostel week is low for what it is—room, board, and tuition—it is certainly not low cost adult education, costing around $100 per week plus travel.

With all these things wrong with Elderhostel, most needs assessments would predict almost certain failure. Yet the program has had spectacular success, growing from five colleges and 200 participants in 1974 to 129 colleges and 11,000 students today. What is wrong with the needs assessments that they should appear so far off the mark? There are a number of lessons to be learned about the interpretation of data from this simple example of the strange success of Elderhostel.

Some Lessons on Interpretation of Data

First, there is the *lesson of relativity*. The number of older people who express an interest in learning is small *relative* to other age groups. But even if only 9 percent of the respondents over the age of 55 are interested in further education, remember that 9 percent of a national sample representing 104 million adults (Carp, Peterson, and Roelfs, 1974) is still over a million people, and even if only a miniscule 3 percent of them are interested in college level courses, that is still a potential market of 300,000 people for Elderhostel.

I shall label the second lesson about the use of needs assessments to plan educational programs the *interpretation error*. It is vividly illustrated by the apparent folly of the designers of Elderhostel to note that most needs assessments show that transportation to educational sites is a common barrier for older people. There is, however, an individual perception behind every response. Many older people perceive getting to a campus at night by bus or car once a week a "transportation problem" whereas driving a couple hundred miles across the scenic New Hampshire countryside on a summer vacaton to attend Elderhostel is not considered a transportation problem. Similarly paying $50 for a semester-long course might be perceived as a cost barrier, but spending $100 a week for a learning vacation can be interpreted as a genuine bargain.

The third error commonly made in interpreting needs assessments is the *lumping error*. Most needs assessments are currently lumping everyone over the age of 55 or 65 together in a group labeled "the elderly." They do this because the numbers in the cells of the older age groups are usually small, and a larger N is needed to give reliable figures. The problem is that in solving the statistical problem of a too-small N, a new problem is created when dissimilar groups are merged.

Bernice Neugarten (1975) says the young-old represented by people between the ages of 55 and 75 are a very different group from the old-old who are people over the age of 75. The young-old are in good health, have better educational backgrounds, and a more lively outlook on life than the old-old. It is the young-old who constitute the chief constituency of Elderhostel, but because of the lumping error in needs assessments, the young-old are not a visible group; they appear at the old end of the age spectrum and hence are categorized and pictured as "elderly." The lumping error also occurs consistently in needs assessments purporting to show sex differences in learning needs. There is evidence that the educational needs and interests of working women are more like those of working men than they are like those of other women. Lumping women together as a category makes it appear that there are sex differences in learning needs when, in fact, the differences are more probably attributable to differences in learning goals.

Finally, there is the *small picture* error. Data from the needs analyses come in small fragments, but an educational program is more than the sum of its parts. Elderhostel apparently offers an atmosphere of friendly conviviality with interesting people from all over the country, and it is the total experience rather than the classes per se that are the primary attraction.

The Art of Needs Assessment

All of these possible errors serve to illustrate the point that statistical technique and research know-how do not suspend the need for sensitive interpretation of the meaning behind the data. My paper is deliberately entitled "The state of the art . . . ," rather than "The state of the science" because conducting and utilizing survey information is as much an art as a science. The needs assessor needs the sensitive observations and experience of the adult educator as much as the adult educator needs the technical expertise of survey researchers. But what all of us need is more imaginative, creative approaches to the art of needs assessment. Although I had nothing whatever to do with selecting the needs assessment models that are featured at this conference, I am struck by the observation that the one thing these four very diverse approaches have in common is that they knew what they wanted to accomplish. They assessed their own needs for information before embarking upon their needs assessments.

As I look back over the needs assessments of the last five years, I think the greatest inadequacy has been, not in the technical niceties of research design, but in the failure to assess the information needs of the needs assessor and then to design a method of data collection appropriate to those needs.

The study conducted by Marjorie Murray (1979) is a splendid example of what can be done when the problem is defined first and the study designed around that problem. The usual questionnaire or telephone interview survey would have been quite inappropriate for assessing the learning needs of the severely educationally deprived citizens of West Oakland. Thus a continuous, collaborative process was devised in which adults are helped to conduct a self-inventory of their educational needs, and community workers are fully involved in the assessment, planning, and evaluation stages. In this way, the educational program developed by Holy Names College literally evolves out of the needs of the people and the community, and assessment, program planning, and evaluation are integrated into one continuous process.

This particular design also has a built-in answer to two of the most troublesome problems in needs assessments—how to convert the data into workable educational programs and how to gain acceptance in the community. When those implementation questions become an integral part of the needs assessment, there is no need for the overworked four-step approach which is to conduct the needs assessment, develop a program on the basis of the information, market the program and conduct an evaluation. I say the four-step approach is overworked, but I probably should say that it is "over-aspired"to. What happens all too often is that the needs assessment ends after Step 1, and Steps 2, 3, and 4 are never realized.

This may be a good time to point out that Step 4, evaluation, is a critical component of any program designed to serve the needs of adult learners. The neat thing about Ms. Murray's design is that evaluation is built in so that it serves as a continuous needs assessment. The purpose of a needs assessment after all, is to identify needs that are not being met and unmet needs may be as prevalent among enrolled students as among potential learners.

As fine as Ms. Murray's approach to needs assessment is, it would not be appropriate to the task that the New York State Education Department (Veres, Mangano, Freeborne, 1979) wanted to accomplish. Their approach to needs assessment represents a Category II need, i.e., the need of a state educational planning office to identify the needs of adult learners and the barriers to their participation across the state. They, like Ms. Murray, used a collaborative approach, involving local school districts, Boards of Cooperative Educational Services, and two-year colleges. The contribution of the State Education Department was in the research expertise, management and coordination of a massive interview study of some 20,000 New Yorkers.

Falling between the small, intimate West Oakland study and the massive New York State effort are the other two needs assessments featured at this conference. They too had a clear notion of what they wanted to accomplish. Dr. Cohen (1979) identified a serious problem which was that dramatic changes in health care in the United States have resulted in a lack of congruence between the past training of nurses and the jobs they are expected to perform in today's health profession. Implementation of her study should not be difficult because her needs assessment was

designed to shed light on a problem that was already widely recognized in the nursing profession. Similarly, Dr. McClain (1979) identified the target population of reentry women as a group of adults whose changed life circumstances created a demand for new educational experiences.

Balancing the Art and Science of Assessment

In general, a needs assessment that sets out to *solve* a problem will be far easier to implement than needs assessment that sets out to *find* a problem. To date, however, there are more studies in search of problems than in search of answers—which is not to say that we don't need both kinds of studies. It is to suggest, however, that future needs assessments might make more significant contributions by starting with problems already identified in the large number of state needs assessments, and moving toward the search for program components that will meet the needs of identified target groups. In the long run, a study motivated by the desire to serve the needs of learners will probably be more successful than a study motivated by the desire to "collect data," "do a study," or "engage in long-range planning."

If you came to this conference with your needs for information clarified, I hope that you can use the conference to help you design a competent study technically. If you came with the intention "to do a competent study" I hope that you will use the conference to clarify your needs for information. Both are important aspects of needs assessments, but so far, the science of needs assessment is considerably ahead of the art, and my hope for the future is that we may achieve a better blend between the art and the science of needs assessment.

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Part II
Four Needs Assessment Models

Felissa L. Cohen — Assessment of Need for a Baccalaureate Completion Program in Nursing

Ruth S. McClain — An Assessment of Needs of Adult Women Returning to Higher Education at Springfield Technical Community College

M. Griffin Murray — The Unknown Citizens: Adult Learners in the Inner City

Helen Veres, Joseph Mangano, and Gerald Freeborne — Information and Involvement: The New York State Continuing Education Needs Assessment

Felissa L. Cohen

Assessment of Need for a Baccalaureate Completion Program in Nursing

Introduction

Involvement of Sponsoring Agency: Illinois State University

As changes in the health care system and new skill expectations of registered nurses (RN's) made an impact in central Illinois, Illinois State University (ISU) was asked to meet these needs by initiating a program granting a bachelor of science in nursing degree to RN's who had graduated from AD and diploma programs. In 1975, an attempt was made to fit RN's into the already established contract major offering. Although well intentioned, there was no way to evaluate past nursing education, and blanket credit for the nursing diploma was given, a practice frowned upon by nursing educators (Statement of Concern, 1971). Inclusion of nurses into the contract major led to a generally unfavorable response. Providing nurses with a baccalaureate degree in another field does not provide upper division nursing knowledge such as community health nursing assessment and management skills. It does not prepare nurses to advance in their profession, or to be eligible for admission to graduate programs in nursing.

Thus, the Illinois Board of Higher Education agreed to fund a study during the academic year 1977-1978 to assess the need for a BSN completion program in central Illinois, and to determine what resources would be necessary in order to implement such a program at ISU.

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The process of assessing the need for a BSN completion program at ISU is the focus of this paper. The assessment of need includes a short description of nursing education health trends; professional changes in nursing to meet these needs; the current status of BSN programs in the central part of the state; the educational level of RN's in different areas of the state; and the needs of area employers and clients. However, the main part of this paper is concerned with the assessment of potential clientele by means of a survey. The original study included a profile of and potential impact of the program on both ISU and the Normal-Bloomington community. A review of the literature helped in defining potential assessment areas, and BSN completion programs across the U.S. were contacted.

Assessment of Need

General Description of Nursing Education

At this time, educational preparation for beginning practice as a registered nurse has three major routes.

Associate degree (AD) programs are usually established within a junior college. The length of the programs vary from two academic to two calendar years. In the period from 1958 to 1977, the number of associate degree programs in the United States grew from 40 to 645, and at present, the majority of nurses being graduated in the United States are from associate degree programs (National League for Nursing, 1978).

Diploma programs are the oldest nursing education programs. The course of study now ranges from 22 to 36 months. Although the school may contract with local colleges or universities for instruction in non-nursing courses, the diploma nursing program is not controlled by an institution of higher education but by a hospital. Upon graduation, the student receives a diploma in nursing, but not an academic degree. In the period from 1958 to 1977, the number of diploma schools in the United States decreased from 940 to 367 (National League for Nursing, 1978).

Generic baccalaureate (BSN) programs in nursing are located in senior colleges or universities. They are generally four years in length. Experiences take place in many types of health settings. It is the only program to provide theory and experience in community health nursing and to prepare these practitioners. The student is graduated in most cases with a bachelor of science degree in nursing, which is necessary for entrance into nursing graduate programs. Baccalaureate programs have increased in the United States from 95 programs in 1953 to 344 programs in 1977 (Davis, 1975; National League for Nursing, 1977, 1978).

This diversity in nursing educational patterns has led to much conflict in nursing.

Felissa L. Cohen teaches at the College of Nursing, University of Illinois at Peoria.

Need for Baccalaureate Education in Nursing

Health Care Trends

Changes in health care trends in America have impacted upon the role of nursing. Some of these changes are: increased involvement and decision-making of health care clients in their own care as clients are better educated about health; insistence on availability of quality health care to all; change from emphasis on "sick" care to "health" care promotion and maintenance with more prepaid health maintenance plans; move to national health insurance; movement of health care out of institutions and into the community leading to an increased number of home health care programs; larger group of aging population, with 30 million elderly predicted by the year 2000; focus of hospital care on the acutely ill and on extensive technology; increased use of computers for data bases, diagnoses, treatment protocols, etc; increase in further understanding of and need to manage stress-related diseases; and potential for global spread of communicable diseases (Brunetto and Birk, 1972; Bryant, 1975; Lawrence, 1976; Matek, 1973; Prock, 1973).

Changes in the Nursing Profession

As society changes, the role of the professional nurse also changes--as nursing is involved with people in their social as well as their health milieu. Many nurses are beginning to practice nursing as independent practitioners or in group practices affiliated with hospitals, especially in rural areas. They may manage patients with chronic diseases, do histories and routine physical examinations for adults and children, coordinate health maintenance and prevention plans for families, do a variety of home health care services, teach and supervise paraprofessionals, do pre-and postnatal care, assume responsibility for the quality of problem oriented medical records, do mental health assessment and counseling, and educate patients. Other functions may be shared. A nurse, therefore, must not only have specialized nursing knowledge, but the ability to communicate with other professional workers and with health clients.

A BSN degree is designed to prepare the registered nurse with the educational foundation necessary to adapt and function in a dynamic health environment. It prepares a professional nursing practitioner who has the following attributes:

(1) Can utilize the nursing process in a variety of health settings.

(2) Can collaborate with other health professionals.

(3) Has the basic foundation necessary to adapt to and effect change.

(4) Can synthesize and apply knowledge from the liberal arts, humanities, and basic sciences as a basis for nursing practice.

(5) Can think critically, using the scientific process, and make effective decisions.

(6) Can read and understand research reports and adapt the relevant findings to professional nursing practice.

(7) Has effective communication skills—both verbal and written.

(8) Has regard for the intrinsic worth of all clients seeking health care.

(9) Can assist clients to optimum health.

(10) Can plan, implement, and evaluate client and family teaching.

(11) Can provide skilled nursing care in acute care and community settings.

(12) Can coordinate client and family care for health maintenance and health promotion in a developmental context.

(13) Can perform triage according to priority of needs.

(14) Is accountable for his/her own professional practice.

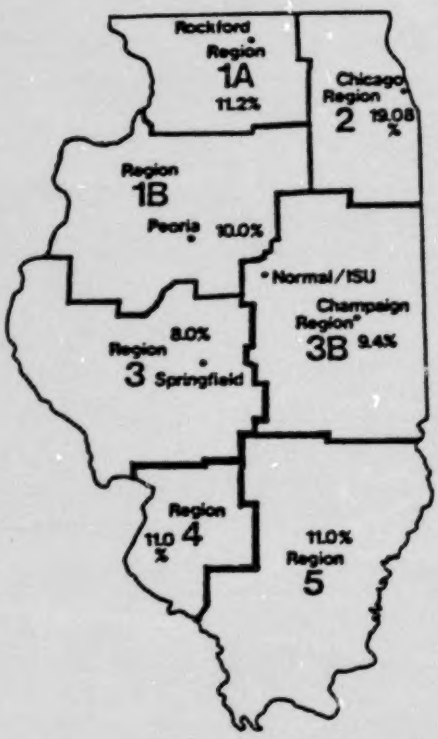
(15) Has the appropriate foundation for graduate study in nursing.

In short, it provides the registered nurse with the opportunity to extend nursing knowledge to the professional nursing level.

Nurses are the largest single group of health workers. They are also the only professional group whose education does not require the minimum of a baccalaureate degree for entry into professional practice. In 1965, the American Nurses' Association prepared a stand on nursing education calling for all such education to move into institutions of higher education, and for the minimum preparation for beginning professional nursing practice to be baccalaureate education in nursing (American Nurses' Association, 1965).

In New York, proposed dual licensure differentiating between the professional and technical nurse, with the BSN as the minimum degree for the professional nurse, is scheduled to become reality in 1985 (NYSNA Calls for B.S., 1975). In Illinois, the Illinois Nurses' Association has voted to study the impact of requiring the BSN degree as the minimum entry level into professional practice (Resolutions Reflect Practice, 1977), and in 1978-79 is assessing this impact by holding forums throughout the state. Twenty-seven other state nurses' associations have gone on record supporting this licensure (Update, 1979). Although most proposals would have a "grandfather" clause, nurses without a BSN would be severly disadvantaged. The movement towards establishing the BSN degree as the minimum level for professional nursing practice is another reason for increasing the opportunities for nurses to achieve this degree.

It is estimated that, overall, only 15.0% of nurses in Illinois are appropriately prepared at the baccalaureate or higher degree level in nursing. In Region 3B, where ISU is located, that percentage is 9.4%; in neighboring Region 1B it is 10.0%; and in neighboring Region 3A it is 8.0%.



(Illinois Implementation Commission on Nursing, 1975; Illinois, State of, 1975). Central Illinois has maldistribution and shortage problems for both RN's and physicians. Moreover, McLean County where ISU is located, and those counties surrounding it, are in a period of rapid population growth and still experience a shortage of RN's. Thus, this area of the state could benefit from the services of RN's with the education to manage chronic illnessess (under medical supervision), and to monitor school and pre-school-screening and well child care.

Manpower projections for nurses as to quantity rather than quality have not been discussed here as they are not relevant to the type of program being proposed. However, it should be noted that once supply begins to approach the demand level, then the issue of quality of the supply gains rapidly in importance.

Availability of Programs

Opportunities for the RN to return to school for a degree in a program tailored only for RN's are very limited in the state of Illinois. There were only two programs for RN students, both of which were beyond 60 miles from ISU and in the eastern and southern areas. A past study on nursing education has defined 60 miles as a reasonable commuting distance (Taylor, 1971). This leaves the west central portion without any programs. One of these programs requires full time day study, and is limited to a small enrollment; the other has only upper-division courses, so that lower division courses cannot be remedied. Although all but one of the generic BSN programs admit RN's on an "as space permits" basis, the private generic program closest to ISU is the one that does not, and stated that they had no plans to admit them. These programs in central Illinois are only in private universities and thus are expensive; they expect the RN to conform to the curriculum model for basic students, leading to much frustration; and instruction is on a full time day basis.

Other universities have offered blanket credit to the registered nurse toward a degree in "health arts" or a facsimile. These degrees are of little further use to the RN in advancement in her profession and as a foundation for graduate education in nursing as they offer no advanced nursing content. The nursing profession has taken an active stance in discouraging these types of degrees (Resolutions Reflect Practice, 1977; State of Concern, 1971).

Thus it could be seen that there would be no conflict of interest with another university if ISU offers an upper division baccalaureate completion program with a major in nursing.

Assessment of Potential Clientele

Survey Description

An instrument was developed to ascertain the level of interest in a BSN completion program at ISU (Appendix A and B). This instrument was designed to answer questions relevant to both program and curricular planning. The final questionnaire was purposely kept short in order to maximize the rate of response, and could be answered simply by circling one number as a response to each question. Space was left for any comments that the respondent wished to make.

Registered nurses, who had already graduated from basic nursing programs, and senior student nurses were both surveyed. This was done to compare the needs, background and interests of both the pool of RN's who had not pursued a BSN, and the pool of future nurses. Names and addresses were asked for in order to build a future mailing list. A brief letter of explanation and, in the case of the RN's, a postage-paid, addressed envelope accompanied the instrument.

The survey instrument for RN's was distributed in two ways: by direct distribution through the directors of nursing of the major health care facilities and the local nursing association districts; and by mail through a random sample of 10.0% of the RN's in the counties within 1½ hours commuting time from ISU as listed by the Illinois Department of Registration and Education. Respondents were asked to respond only once if they received two copies of the survey.

The survey instrument was distributed to senior students in five diploma and five associate degree programs through the directors of the ten participating schools of nursing. While this did not necessarily mean that all of these students would stay in the central Illinois area, the results would indicate the educational background and needs of the upcoming RN population from which future applicants would be drawn. This instrument was shorter

than that used for the RN's due to the elimination of those questions not relevant to students.

Out of a total of 1,720 questionnaires distributed to RN's, 1,338 were returned for an RN response rate of 77.8%. Of these, 1,162 questionnaires were analyzed, as some respondents had left the state or already had BSN degrees. Responses were received from 466 of the 580 questionnaires distributed to senior students for a student response rate of 80.3 percent. RN respondents were characterized as to the type of basic nursing program from which they graduated. The majority (n=927, 80.0%) had graduated from diploma nursing programs and the rest (n=231, 20.0%) from AD programs. In contrast, responses from students were almost equally distributed between AD (n=227, 48.7%) and diploma (n=239, 51.3%) programs, reflecting trends discussed earlier. The largest group of RN's had graduated from their basic programs five years ago or less (n=443, 38.3%) while 207 (18.0%) had graduated more than 25 years ago.

Various places of employment were cited by the RN respondents. The number of health care institutions represented totaled 118. The majority of RN's were employed in hospitals (n=944, 82.3%). Thirty-three counties in Illinois were represented in the sample. Interest in enrolling in a BSN completion program at ISU was demonstrated by 868 (75.3%) of the RN respondents, an obviously high level. Of those indicating they were not interested, 15 (1.3%) indicated that they were near retirement age. Of those indicating that they were not interested at this time, many indicated that they were new graduates, or newly married. The number of students indicating interest in enrolling in a BSN completion program at ISU was 374 (80.6%). There was no statistically significant relationship between diploma and AD students and interest level on chi square analysis. The majority of the students surveyed indicated that they wished to enroll in a BSN completion program within one to three years after graduation (n=313, 67.3%).

Data analysis of the responses showing interest level versus length of time since graduation reveals that 84 of the 103 (81.6%) respondents indicating no interest in the program graduated more than 15 years ago and 73 of these 103 respondents (70.9%) graduated more than 25 years ago. Forty-seven of 181 (25.6%) indicating that they were not interested at this time had graduated five years ago or less. Thus, it appears that the length of time these nurses had been out of school was a major influence on their interest in returning. The level of interest was highest in those living within 1½ hours of ISU.

In decreasing order of frequency, Table 1 represents the reasons cited by RN's who wished their degree but did not previously seek the BSN degree. Chief reasons for this that relate to the institution are those of availability, cost and/or accessibility.

The reasons given by RN's and students for wanting to obtain their BSN degrees are listed in decreasing order in Table 2. These responses were somewhat surprising. Approximately 80% of these RN's recognized that baccalaureate education would expand their knowledge of nursing. This was identified as their major reason for seeking the BSN degree, followed closely by personal satisfaction. Students, on the other hand, identified the expansion of job opportunities as their major reason, followed by expanding nursing knowledge. Thus, the students appear to be more future-goal oriented. Perhaps this is a reflection of their younger age. There was no significant difference between diploma and associate degree students in the reasons they cited.

Table 1

Reasons Given by RN's Citing Interest for not Previously Seeking BSN Degree (n=865)*

Reason	Number	Percent
Unavailability of program	537	62.8
Family responsibilities	456	52.7
Cannot travel to existing programs	410	47.4
Cost of existing programs	298	34.5
Problems of scheduling courses	242	28.0
Financial problems	229	26.5
Program not suited to the RN student	167	19.3

*Multiple responses given.

A part-time program of study was the most preferred option identified by both the students (n=237, 54.7%) and the RN's (n=606, 72.2%). This may reflect the lack of family responsibilities or full-time jobs in this student population, or it may reflect a difference in future trends in acquiring the BSN. A combination of full and part-time study was preferred by 150 (34.6%) of the students and 179 (21.3%) of the RN's. The option of attending summer school was less attractive to the RN's than to the students. The overwhelmingly most popular time to take courses was from 6:00 p.m. to 9:00 p.m. with 593 (71.6%) selecting that time period. This information was collected in order to realistically plan course schedules and modular arrangements. Planning for a curriculum should include the realization that changes in the needs of the clientele must be reflected in flexible course and time scheduling. Periodic reassessment should provide further information.

Only 469 (39.6%) of the 1,153 RN's answering had taken any formal college work since graduation from their basic nursing program. No significant difference existed for this variable between the diploma and associate degree graduates. However, there was a statistically significant relationship demonstrated between level of interest in the program and whether or not the respondent had taken formal course work since graduation. Those who had taken some course work were more likely to be interested in enrolling in the BSN program ($x^2=48.67$, $df=4$, $p<.001$).

In order to assess the possible course deficiencies of both RN's and students, they were asked to indicate the courses they had taken in a college setting. Since many courses pertaining to nursing can rapidly become outdated in knowledge, RN respondents were asked to indicate the length of time since they had completed the specific course (see Table 3).

Only courses taken in a college setting were asked for because it can be difficult to evaluate those course credits earned in other settings. These results indicate the need for the entering student to be given the opportunity to validate his/her knowledge in these areas, as it may not be pos-

Table 2

Major Reasons Cited by RN's (n=865) and Students (n=450) for Wanting to Obtain a BSN Degree*

Reason	RN's		Students	
	Number	Percent	Number	Percent
To expand nursing knowledge	695	80.4	370	82.2
Personal satisfaction	685	79.2	336	74.7
May be required for professional nursing in future	576	66.6	327	72.7
Expand job opportunities	537	62.1	380	84.4
Increase specific nursing skills	447	51.7	281	62.4
Eventually pursue master's degree	142	16.4	121	26.9
Advancement in present position	125	14.5		
Degree expected by employer	35	4.5		

*Multiple responses given

Table 3

Non-Nursing Courses Taken by RN's and Students in Colleges and Universities

Course	RN's				Students	
	Taken Less Than 5 Years Ago		Taken More Than 5 Years Ago			
	Number	Percent	Number	Percent	Number	Percent
Organic chemistry	33	3.7	53	9.6	87	18.6
Biochemistry	118	12.6	196	21.0	112	23.9
Inorganic chemistry	126	13.7	187	20.3	142	33.8
Microbiology	268	28.2	314	33.1	307	65.6
Anatomy and physiology	320	33.3	336	35.0	386	82.5
Growth and development					414	89.8
Sociology	371	38.8	335	35.0	423	90.4
Psychology	415	43.0	353	36.5	456	97.4

sible to directly transfer credit for a majority of these nurses. Those non-nursing credits which could not be validated by transcript from an accredited college or university could be validated by an examination such as CLEP, NLN or departmental according to the current policies of ISU. Prior nursing credits would be evaluated and transferred by the nursing department according to the NLN guidelines. Additionally, some individuals may have kept pace with new knowledge and developments, although the elapsed time since formal course work may not reflect it. These students should also have the opportunity to demonstrate their comprehension of such knowledge.

These results also indicate that greater proportions of students are obtaining non-nursing courses in the college setting than previously, particularly in the social sciences. The largest apparent deficiency among all potential incoming students is in chemistry, but recent graduates will be more prepared than RN's who graduated years before. These data will aid in curriculum planning for this proposed program, and will provide direction for closer curriculum coordination between an upper division BSN completion program at ISU, and the diploma and AD programs in the central Illinois area.

Illinois State University

Illinois State University has maintained a relatively stable enrollment of approximately 19,000 on-campus students over the last several years. In 1978, there were 59 undergraduate major fields of study, 32 major fields at the master's level, and nine doctoral programs (Illinois State University, 1977).

ISU is fully accredited by the North Central Association of Colleges and Secondary Schools. The university is committed to seeking accreditation for all academic programs by the appropriate accrediting association. The commitment of ISU to the basic liberal arts as a foundation for knowledge and emphasis on applying knowledge to human problems is particularly compatible with the philosophy of a baccalaureate nursing program.

ISU has a long history of adult full and part-time learners returning to school, and has long had a tradition of evening classes to meet the needs of these students. In the past, this has been mainly in the educational fields, but certainly provides the precedent for evening scheduling in nursing, where possible, to permit program flexibility

without compromising quality. Since most RN students will be over age 21, the "adult learner" population on campus will be increased. Campus resources for these students may also need to be increased. These students will bring with them a wealth of life experience that can be related to classroom theoretical learning. The program will build on the strengths of experience and knowledge already possessed by the RN instead of forcing this individual into a standard nursing program, geared to a younger person. This type of program should also allow access to higher education for students from lower income groups who chose the community college or diploma program route to enter nursing for financial reasons. Since it is planned to offer part-time and evening courses, it will allow the working RN to have access to the baccalaureate degree in nursing without severe financial and/or family stress. It will also allow the RN the chance to realize a change in career goals, as it will prepare him/her for those jobs that require the BSN degree. Further, once obtaining the BSN, the RN would be eligible for entrance to master's programs in nursing to further enhance career flexibility and potential.

The Community: Needs and Involvement

Profile of Normal-Bloomington

The combined population of the two cities where ISU is located is approximately 80,000. The median educational level is high at 12.6 years, median family income for McLean County is reported at $10,183 in 1970, and the unemployment rate is consistently one of the lowest in the state (Pohlmann, 1977). It ranked sixteenth out of 95 standard metropolitan statistical areas (SMSA) with population under 200,000 in overall quality of life across the nation (Liu, 1976). The cities alone have three general hospitals, one county health department, a county nursing home and at least 50 agencies which use nursing services of some type.

Community Input

Community input was accomplished in several ways. A nursing advisory committee was established early in the course of the study. The members of this committee represented all of the nursing programs and major health care facilities in Normal-Bloomington, and a representative group of nursing educators, nursing administrators, and nursing leaders in the surrounding area.

As the actual nursing advisory committee was designed only to be representative, not all-inclusive, leaders in other health agencies and nursing schools throughout the state were visited in order to obtain their input.

Non-nursing input was obtained from the community advisory council to ISU which consists of non-academic leaders in the Normal-Bloominton area. The local newspaper described the study and its progress to its readers.

Needs of Area Employers

Although data has been collected periodically about specific numbers of nurses needed in health care agencies in central Illinois, this data does not prove very useful in need assessment as related to educational level of nurses for several reasons: In order for this data to reflect current needs, it must be collected too frequently to be practical; employers may desire to require rather than recommend the BSN degree for certain job positions, but since there are not enough BSN nurses available to meet the demand, they cannot firmly implement this policy; the numerical data on nursing employment does not always reflect the high turnover rate and numbers of part-time and per diem employees found in nursing (Jelinek and Dennis, 1976); population characteristics may influence the numbers and types of nurses needed.

Data from the health care institutions represented on the nursing advisory committee indicated that the major reason for the high turnover rate in central Illinois was due to the lack of an educational program in which they could pursue their BSN degree while working. Nurse turnover is costly, and giving the RN the opportunity for educational advancement at the same institution is a major factor in decreasing turnover (Jelinek and Dennis, 1976).

Many states require a BSN degree as a minimum educational requirement for community health and school nurses. Illinois has had to be ambiguous about this as they could not fill their positions if they required the BSN. Recommendations made by the Illinois Coalition of Community Health Nurses reflect this concern (Resolutions Reflect Practice, 1977). Increases in home care and school health programs will result in a smaller ratio of BSN nurses to the population being served. Other institutions reporting had top level and intermediate level nursing positions such as directors, coordinators, head nurses, supervisors, in-service instructors and clinicians awaiting a BSN-prepared nurse. Those institutions represented on the advisory committee noted those positions that should require a BSN actually had between 0 to 12% of the nurses filling those positions with that degree: A sampling of employment opportunities in Illinois requiring a BSN that were advertised was attached to the original report.

Basically, needs of the local employers of nursing are a reflection of the health care trends detailed earlier in this paper. Particular areas of concern currently are in developing patient and family education programs, primary care nursing, changing nursing notes to the problem-oriented type recording, developing infection control programs, and increasing nurse clinician roles. The advisory committee also noted a shortage of master's degree prepared nurses for teaching and specialist roles. Nurses must acquire the BSN degree before they can progress further educationally. Specific dates mandating degree requirements for schools of nursing have been established in Illinois (Illinois, State of, 1975). Thus, the upper division BSN completion program at ISU would allow health care providers to fill their leadership and administrative positions with the educational level desired and recommended by state and national guidelines. Employers would also be able to recruit RN's more effectively because of the attractiveness of a near-by BSN completion program that is geared to the RN's needs and background.

Needs of Health Clients

According to a preliminary survey by the health committee of the Association of Commerce and Industry (1979), health care recipients in Normal-Bloomington are not experiencing the level of health care desired. Many residents are, therefore, leaving the communities to seek such care. Concern about this has prompted a full-scale survey which is currently in progress.

If health care providers can fill nursing positions with qualified RN's, then there should be an increase in the quality of health care and services extended to the client in central Illinois.

Resultant Actions and Current Status

Based on these acute and compelling regional and state needs, on the results of this needs assessment, and on the strengths and resources of Illinois State University, it was recommended that an upper division baccalaureate completion program leading to the bachelor of science in nursing degree be established at ISU.

The needs assessment and feasibility study was submitted to the dean of undergraduate instruction of ISU in May, 1978. It included the information given in this paper, administrative placement recommendations, a curricular plan, admission standards, a proposal for validation of past coursework, and resource requirements. The resource requirements included budget, faculty and staff qualifications and numbers, physical facilities, and instructional materials necessary to begin and implement the program over a five-year period. Included in the resource analysis was an evaluation of possible funding support, an analysis of potential clinical facilities, and a description of a phased-in program implementation process. A separate New and Expanded Program Request (NEPR) document for the Illinois Board of Higher Education (IBHE) was also completed. Copies were distributed to the staffs of the IBHE, the Board of Regents (BOR), the members of the nursing advisory committee, the state nurses' association, and individuals within ISU such as the president, the administrative council members, department heads and others.

In September of 1978, a joint meeting of representatives of the staffs of the IBHE and the BOR, the provost and associate provost from ISU, and the director of the nursing feasibility study met in Springfield to clarify and discuss the report.

Community interest remains strong. The university is attempting to keep the nursing advisory committee informed about major developments as they occur by sending them periodic information. The committee in turn relays this information to nurses in their organizations and institutions.

The plan for a BSN completion program has already been approved by the university internally. In June, 1979, the NEPR document will formally be submitted to the Board of Regents, and, if approved, will be submitted to the Illinois Board of Higher Education for approval and funding.

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Appendix A and B

Needs Assessment Questionnaire:
Nursing

APPENDIX A

SURVEY INSTRUMENT FOR REGISTERED NURSES' INVENTORY OF INTEREST
IN A BSN COMPLETION PROGRAM AT ISU

ILLINOIS STATE UNIVERSITY
Normal, Illinois 61761

QUES _____	1-4
LOC _____	5-6
EMP _____	7-8
POS _____	9-10

NURSING PROGRAM FEASIBILITY STUDY
INVENTORY OF INTEREST IN BACCALAUREATE COMPLETION PROGRAM FOR R.N.'s

Please circle one code number for each question unless otherwise instructed.
Please answer questions on both sides of questionnaire. Thank you.

1. In what type of program did you obtain your basic nursing education? (circle one)
   Associate degree program..... 1
   Diploma program..... 2
   Baccalaureate program..... 3
   (If you have obtained a BSN please do not complete rest of questionnaire.)
2. What is the highest academic degree you now hold? (circle one)
   Associate degree..... 1
   Diploma in nursing..... 2
   Baccalaureate degree in a field other than nursing..... 3
   Baccalaureate degree with a major in nursing..... 4
   (If you have a BSN, please do not complete rest of questionnaire.)
   Other (state)..... 5
3. How long ago did you graduate from nursing school? (circle one)
   Five years or less..... 1
   Between five and ten years..... 2
   Between ten and fifteen years..... 3
   Between fifteen and twenty-five years..... 4
   More than twenty-five years..... 5
4. A. Have you taken further formal college coursework since your basic education? (circle one)
   Yes..... 1 No..... 2
   B. Are you presently enrolled in a program with a major in nursing?
   Yes..... 3 No..... 4
5. If yes to 4A or 4B, at which institutions? (circle all that apply)
   Bradley U..... 01 Western Ill. U..... 07
   Millikin U..... 02 Sangamon State U.... 08
   U of Illinois..... 03 Ill. Central Col.... 09
   Northern Ill. U..... 04 Kankakee Com. Col... 10
   Ill. Valley Com Coll... 05 Southern Ill. U..... 11
   Ill. State U..... 06 Other (state)..... 12
6. Are you presently enrolled in a baccalaureate program with a major other than nursing? (circle one)
   Yes..... 1 No..... 2
7. If yes, at which institution? (circle one)
   Bradley U..... 1 Western Ill. U..... 6
   Millikin U..... 2 Sangamon State U..... 7
   U of Illinois..... 3 Southern Ill. U..... 8
   Northern Ill. U..... 4 Other (state)..... 9

8. What is your own level of interest in enrolling in a baccalaureate completion program at Illinois State University? (circle one)
   Very interested.. 1 Somewhat interested..... 3 Not interested.. 5
   Interested..... 2 Not interested at this time.. 4
9. Please indicate by circling the appropriate number which of the following courses you have taken in a college or university.

	Yes	Yes--More than 5 yrs ago	No
Growth & development	1	2	3
Inorganic chemistry	1	2	3
Organic chemistry	1	2	3
Biochemistry	1	2	3
Microbiology	1	2	3
Anatomy and Physiology	1	2	3
Psychology	1	2	3
Sociology	1	2	3
Mathematics	1	2	3

10. If you are not presently enrolled in a baccalaureate program in nursing, and are interested in doing so, what are reasons that you have not pursued it? (Please circle all that apply.)
    Family responsibilities.... 01 Cost of existing programs..... 05
    Unavailability of program.. 02 Problems of scheduling courses. 06
    Financial problems..... 03 Program not suited to RN student..... 07
    Cannot travel to existing programs..... 04 Other, please state_____ 08
    _____
11. Which of the following would you be most interested in?
    Full-time study for entire program..... 1
    Part-time study for entire program..... 2
    Combination of full and part-time study..... 3
    Not interested in further education in nursing at this time..... 4
    Other, please state_____ 5
12. Would you be able to (or desire to) do more concentrated work in summer sessions?
    Yes..... 1 No..... 2
13. What are the best times of day for you to take course work? (Circle all that apply.)
    8am-9am..... 1 3pm-4pm..... 5
    10am-12 noon..... 2 4pm-5pm..... 6
    12 noon-1pm..... 3 6pm-9pm..... 7
    1pm-3pm..... 4
14. What is your chief reason for wanting a baccalaureate degree in nursing? (Circle all that apply.)
    Personal satisfaction..... 01
    Expand job opportunities..... 02
    Eventually pursue master's degree..... 03
    Advancement in present agency..... 04
    To expand nursing knowledge..... 05
    To increase specific nursing skills..... 06
    May be required for professional nurses in future..... 07
    Degree expected by employer for present position..... 08
    Other, please state_____ 09

APPENDIX B

SURVEY INSTRUMENT FOR SENIOR
NURSING STUDENTS' INVENTORY OF INTEREST
IN BSN COMPLETION PROGRAM AT ISU

Inventory of Interest in Baccalaureate Completion Program for R.N.'s

Please circle one code number for each question unless otherwise instructed.
Please answer questions on both sides of questionnaire. Thank you.

1. Are you currently enrolled in a (an)
   - Associate degree program..... 1
   - Diploma program..... 2
2. Are you interested in enrolling in a baccalaureate completion program:
   - As soon as possible after graduation..... 1
   - Within 3 years after graduation..... 2
   - Three to six years after graduation..... 3
   - At this time, I'm not sure..... 4
   - Not at all interested..... 5
3. Please indicate by circling the appropriate number which of the following courses you have taken in a college or university.

	Yes	No
Growth & development	1	3
Inorganic chemistry	1	3
Organic chemistry	1	3
Biochemistry	1	3
Microbiology	1	3
Anatomy and Physiology	1	3
Psychology	1	3
Sociology	1	3
Mathematics	1	3

4. Which of the following would you be most interested in?
   - Full-time study for entire program..... 1
   - Part-time study for entire program..... 2
   - Combination of full and part-time study..... 3
   - Not interested in further education in nursing at this time. 4
   - Other, please state_____ 5
5. What are the best times of day for you to take coursework? (Circle all that apply.)
   - 8am-9am..... 1
   - 10am-12 noon..... 2
   - 12 noon-1pm..... 3
   - 1pm-3pm..... 4
   - 3pm-4pm..... 5
   - 4pm-5pm..... 6
   - 6pm-9pm..... 7
6. Would you be able to (or desire to) do more concentrated work in summer sessions?
   - Yes..... 1
   - No..... 2

7. What is your chief reason for wanting a baccalaureate degree in nursing? (Circle all that apply.)
   - Personal satisfaction..... 1
   - Expand job opportunities..... 2
   - Eventually pursue master's degree..... 3
   - Advancement in present agency..... 4
   - To expand nursing knowledge 5
   - To increase specific nursing skills..... 6
   - May be required for professional nurses in future..... 7
   - Degree expected by employer for present position..... 8
   - Other, please state_____ 9
8. What is your own level of interest in enrolling in a baccalaureate completion program at Illinois State University? (Circle one)
   - Very interested.. 1
   - Interested..... 2
   - Somewhat interested..... 3
   - Not interested at this time.. 4
   - Not interested.. 5

Name_____

Home address_____

Place of employment_____

Address_____

Position_____

Ruth S. McClain

An Assessment of Needs of Adult Women Returning to Higher Education at Springfield Technical Community College

Introduction

The adult woman represents a growing population of older learners returning to higher education. Data from the U. S. Bureau of the Census (1976) show that currently over one and a half million adult women are enrolled in higher education institutions around the nation. During the last five years, the percentage of adult women 25-35 years of age enrolled in colleges has jumped from fourteen percent (409,000) to twenty-two percent (947,000). Presently, women over 35 years of age account for more than a half million (655,000) of those women returning to higher education.

College enrollments have already been affected by the sagging United States birthrate. If institutions of higher education are going to attract and keep this new clientele of adult women, they must have comprehensive programs that meet the needs of this group.

Purpose of the Study

During the past five years, the enrollment of adult women at Springfield Technical Community College (STCC) has increased forty-eight percent (McClain, 1977, 1978). Prior to this research, no other analysis of this population's needs had been made and there were no programs in operation to serve this body of students.

Therefore, the purpose of this study was to gather and analyze data regarding the needs of adult women returning to higher education at STCC, in order to provide recommendations for comprehensive program development for this group. The study employed the survey research approach utilizing a questionnaire as the vehicle for data collection.

The research was based on six major hypotheses. It was hypothesized that:

(1) The adult woman returning to higher education comes with unclear or unidentified career goals which cause problems in academic as well as non-academic areas.

(2) The adult woman who withdraws from higher education subsequent to her return has a more critical need for career goal setting than do other adult women.

(3) Career planning and career counseling are important services that adult women need.

(4) Adult women feel that the institutional services for academic and non-academic support are unsatisfactory.

(5) "Program hopping" (trying several programs) and non-persistence are the manifestations of unclear career goals.

(6) The women who have the greatest need for institutional services have common demographic characteristics.

Definition of Adult Women

In order to establish a common basis for understanding, the term "returning adult women" is used interchangeably with "adult women" to mean any woman whose age falls within the range from the mid-twenties through the sixties, and whose life experiences can be described in one of the following conditions:

- a woman who completed only high school, but now wants more education for self-fulfillment or marketable skills; or

- a woman who has a degree or some college-level study and now wishes to enter the world of work, but realizes she has no marketable skills; or,

- a woman who has a degree or some college-level study, has entered and withdrawn from the labor force, and now finds herself lacking in marketable skills for today's work force.

Ruth S. McClain is Director of Testing Services and Career Development at Springfield Technical Community College in Springfield, Massachusetts.

Assumptions of the Study

The assumptions of the study were as follows:

(1) That the results of this study, though related directly only to Springfield Technical Community College, would have implications for other community colleges of similar size, location, student enrollment, and adult women enrollment; and

(2) That the results of the study would be able to translate the needs of adult women into recommendations for the development of a comprehensive program, academic and non-academic, for adult women returning to school.

Significance of the Study

The trend of adult women returning to college classrooms cannot be ignored if educational institutions are, in fact, going to serve the needs of their clientele. It seems likely that community colleges in particular will realize significant growth in the enrollment of this population. High quality, low cost, program variety, accessibility, and non-threatening atmosphere are all factors which make the community college desirable for adult women (McClain, 1977; Davis, 1970).

The development of programs for this new clientele must begin with an analysis of population needs in order to plan comprehensively for effective services. Thus, the lack of research in this area made this study not only desirable, but necessary. Perhaps it will motivate further study by other researchers.

Springfield Technical Community College: History and Development of the Institution

Springfield Technical Community College (STCC) is one of fifteen community colleges within the Commonwealth of Massachusetts. Governed by the Massachusetts Regional Board of Community Colleges, STCC is the largest of the system's colleges, is unique because of its technical orientation, and is the largest technical community college in New England.

STCC was established in 1964 by the City of Springfield as Springfield Technical Institute. Then, in 1967, STI became STCC by act of the State Legislature. Accredited in 1971 by the New England Association of Secondary Schools and Colleges, the College has experienced tremendous growth in both enrollment and staff. Enrollment figures for the academic year 1977-1978 were 3,500 students; eleven years ago, enrollment was 400 students.

Over the years, common characteristics of the college's clientele have been identified. Typical STCC students have been:

- local commuters from low-income families, employed, enrolled part-time, lower scores on the SAT, and needing remedial English and Math courses.

Although these characteristics have remained constant, data over the past five years show that changes are taking place *within* these classifications of the student population. These new trends include:

- a shift in the mean age from nineteen to twenty-four;
- a shift in marital status from single to married;
- a trend toward unclear career goals;
- an increase in women's enrollment (a 23% increase); and
- a significant increase (48%) in the enrollment of adult women returning to higher education.

Literature Review

Needs Assessment Studies

Needs assessment studies on adult women have been few. Of the studies to be discussed here, only one represents a community college population. All other study results are based on populations from four-year colleges.

Recurring needs were found consistently throughout the literature. In two of the studies (Geisler and Thrush, 1975; Smallwood, 1977) needs were reported in terms of the study populations' priorities. Since all of the results reported were the same or similar, it appears that adult women have similar needs whether they return to a two- or four-year institution.

Needs

Career counseling was found to be the primary need in a number of studies (Geisler and Thrush, 1975; Smallwood, 1977; Bicknell, 1975; Posner-Cahill, 1978; Hedstrom, 1978; Mahone, 1978). Although adult women have college or skills training as a goal, they need help in discovering more specific focus for their learning.

Child care was reported to be number two in the priority of needs in the same studies. When adequate child care arrangements are not provided, adult women feel a tremendous sense of guilt, and often because they cannot attend to their studies, they "stop out" until satisfactory arrangements can be made.

The third on the list of need priorities, *financial assistance* is desired by adult women either in the form of a loan, grant, or scholarship. Adult women also experience a sense of guilt when family monies, if any are available, are used to finance their schooling. Many women take on part-time work to help out, but the result of that effort creates another complication in terms of adding yet another role to their lives.

The fourth need was that of an *orientation* specific to adult women. Adult women feel anxious and frustrated returning to higher education institutions which focus on the younger student. They need to feel an affiliation with the institution, to understand how the institution operates, and to meet other adult women.

Study skills was the last of the prioritized needs identified by the above authors. Adult women return with the handicap of little or no confidence in their learning ability. This lack of confidence in their ability is compounded by the feeling that they do not possess the necessary study skills (note-taking, reading vocabulary and comprehension, writing skills, etc) to succeed.

Open admissions, credit for prior learning, flexible scheduling, counseling, both for interpersonal relations and time management assistance, and an adult women student organization are additional needs cited throughout the literature. Although not given a high priority status, each need plays an important role in a smooth transition from home to higher education.

Attrition Studies

The literature on the attrition of adult women was also reviewed in an attempt to supplement the information found in the needs literature. The rationale for this approach was that if adult women's reasons for withdrawal and/or "stopping out" are known, then inferences can be made about their needs. Since studies on attrition in returning adult women are nonexistent, this investigation focused on attrition of students at the community college level, regardless of sex or age.

To date there are only a few of these studies. Bossen and Brunett (1970) indicate that factors of student withdrawal fall into three major categories: personal, social and academic.

These major categories seem to take into account all of the reasons for non-persistence stated by individuals studied by White (1971), Hartig (1962), Davis (1970), and Matson (1955). These investigators found that the most commonly stated reasons for non-persistence of students at the community college were: uncertain or unclear goals, lack of interest, personal/psychological/health problems, financial problems, poor grades, family conflict and college courses not being related to goals. Two additional causes for adult non-persistence were lack of time to attend classes (work conflict) and lack of time to do required course work (1962). When compared to the young college age student (18-22 years of age), both Matson (1955) and Richard (1976) found attrition rates to be higher in older students, suggesting further that adult students lack a sense of belonging to or identity with the college.

Because adult women are a relatively new clientele to higher education and the community college, it is not known to what extent the most common factors for non-persistence noted in the literature apply to adult women. It would therefore seem essential to study them as a group.

Study Design

Sampling Plan

The population of adult women studied numbered nearly seven hundred (686). The sub-groups (graduates, non-persisters, and current students) were represented in the following manner:

Group A	(Graduates)	215
Group B	(Non-persisters)	80
Group C	(Current Students)	391

The three groups of adult women were surveyed in an attempt to assess and compare both their academic and non-academic needs relative to their participation as students or former students at the institution. During the third week in November, 1977, a survey questionnaire and cover letter were sent to all six hundred eighty-six women in the study. After a period of two weeks, a postcard was sent as a follow-up reminder to those subjects not responding. In an attempt to obtain a high return rate, a second questionnaire and cover letter were sent to the non-respondents the last week in December, 1977. Of the subjects not responding after the second questionnaire, a randomly selected group was telephoned and asked to respond to the questionnaire items over the telephone.

Instrumentation

Two questionnaires in parallel forms were designed and used to explore the personal, social, and academic needs of the adult women (See Appendix). One questionnaire was for former students, the other for current students. The questionnaire format, multiple choice and open ended, includes a section devoted to demographic data. Pilot tests on the questionnaire were conducted before giving it to the sample. (Because of space limitations only the form for Groups A and B is appended).

In designing the form of the instrument, attention was concentrated on the work of Kegan during his study and development of the *Cycles Survey* (1974, 1975), which is used extensively by the Five College Cooperative to identify student characteristics and needs. The response options employed the use of both an *Extent Scale* and *Satisfaction Scale*, and the format for each question was styled after Kegan's work.

The Extent Scale has five response options as follows:

(1) to a very little extent;
(2) to a little extent;
(3) to some extent;
(4) to a great extent; and
(5) to a very great extent.

Each question is prefixed by the phrase, "To what extent . . . ."

Similarly, questions on the Satisfaction Scale are prefixed by, "How satisfied were you . . . ", and have five response options:

(1) very dissatisfied;
(2) dissatisfied;
(3) satisfied;
(4) very satisfied; and,
(5) not appropriate.

The content of the instrument was derived from the personal-social (non-academic) and academic needs that appear throughout the literature related to the needs of returning adult women. Topics included in the questionnaire items were: career counseling, personal counseling, remedial assistance, child care, financial aid, study skills, health counseling, adult women orientation, and adult women support group.

Because career counseling was found to be the number one need of returning adult women, heavy emphasis was placed on career development in the questionnaire. Variables regarding career development were developed from a model for comprehensive career development constructed earlier by the author (McClain, 1977).

The instrument also seeks information as to one's level of satisfaction with personal situations, such as the home-study environment, child care arrangements, and financial arrangements, and with advertised institutional services, such as counseling (personal, career, health, financial, academic, veterans), individual scheduling, remedial services, and so forth.

The purpose of the demographic questions was to correlate particular characteristics of the population with selected variables in an attempt to make generalizations and possible predictions about the needs of returning adult women.

The demographic data solicited include student status, age, marital/children and income status, years away from formal education, and highest level of education achieved. Other informational questions concern choice of program, credits, withdrawal and transfer information, work status, and transportation. On the questionnaire for Groups A and B (graduates and non-persisters), additional questions are asked in terms of "if" the individual were to return to STCC. These questions focus on the needs of adult women previously discussed, such as career and personal counseling, study skills, orientation, and related needs.

Data Analysis

In analyzing the survey data, four statistical procedures were used. First, a frequency distribution was computed for all items to determine the percentage of subjects responding to each response option. Second, mean scores for each variable were computed when needed for t-tests. T-tests, the third analysis performed, were necessary in order to test the null hypothesis. This test was used to determine whether or not significant differences existed between the means of selected variables (or clusters of variables) for Groups A, B, and C.

The last analysis performed was cross tabulation of demographic information with selected variables. This analysis was done because it was expected that women having similar characteristics such as age, number of years away from formal education, marital status, number of children, and income, would have the same academic and non-academic needs. These results would assist in formulating generalizations about the Group's needs as they relate to particular variables. Additionally, these results would allow for predictions to be made with regard to the needs of returning adult women.

The statistical procedures described above were used for the data analysis rather than multivariate techniques. The latter was attempted but determined inappropriate, because casewise omissions are a condition of the multivariate analysis of variance test. This condition reduced the number of subjects used in the analysis, and consequently, reduced the power of the test itself. To avoid this problem, the researcher decided to use the t-test statistic, and to employ a stringent alpha level (.01) in order to reduce the type I error rate.

Results of Analysis

Survey Response

The overall response rate to the survey was sixty-six percent (66%). Group C, Current Students, had the highest rate, (71%). It is likely that this high rate of return stems from their current active involvement with the institution. The response rate of Group A, the Graduates, was sixty-two percent (62%). For Group B, the Non-Persisters, the rate of response was fifty-six percent (56%),

Demographic Analysis

Demographically, the study respondents can be described as women:

- who represent 53% of the academic programs offered by the institution;
- who are predominately full-time students;
- whose mean age is 36 years;
- who are single (had been married);
- whose income range averages between $6,500 and $9,500; and
- whose mean number of years away from formal education is 16.

Analysis of Study Hypotheses

The data analyses show that hypotheses numbers one, three, and five were rejected, and numbers two, four, and six were accepted. The implications of these results are described below:

1. Although adult women return to college with goals, they feel the need for some form of career development/career counseling assistance.

2. Adult women who withdraw often are divorced. Their withdrawal from their studies is mainly due to conflicts with the family/student role and financial problems.

3. Adult women who withdraw from school do plan to return to their studies, and thus should be considered "stop-outs" rather than "drop-outs".

4. When compared to other adult women, the "stop-out" women have the greater need for career development/career counseling.

5. Adult women need assistance in study skills, tutoring services, and flexible course scheduling.

6. Adult women want personal counseling services.

7. Adult women, especially between the ages of thirty to forty, need assistance with child care.

8. Adult women feel the need for an orientation geared specifically to the adult woman.

9. Adult women want an adult women support group.

10. Although financial aid counseling was not found to be a need by the study population, the results of the cross-tabulations show that financial aid services are most needed by adult women who are divorced and who have incomes between $5,000 and $7,999. Women needing loans for tuition and school expenses have yearly incomes below $5,000.

The findings of this study do tend to confirm the needs of returning adult women found in the literature. In addition, some of the reasons (financial problems, family conflict, health problems, unclear goals, and personal/emotional problems) for the attrition of adult women students are the same as those for the community college student population in general.

Recommendations

Recommendations for a Comprehensive Support Program for Adult Women at the Community College Level

As a result of this research, the model in Figure I is presented as a means of effectively serving the academic and non-academic needs of adult women returning to higher education at the community college level. The model takes the student from initial contact (the application for admission) to the last contact (graduation and post graduation) with the institution. The approach is preventive in nature, that is, it attempts to identify potential problems and provide assistance *before* the student is confronted with difficulty.

The model outlines the process for serving adult women. It is general in nature and can be adapted for use by any institution regardless of its population. The specific way in which the model is implemented (materials and methodology) is dependent upon the racial, ethnic, socio-economic, and educational characteristics particular to the individuals being served.

As programs can only be as effective as the people who develop and implement them, it is essential that the staff chosen to serve adult women have special interests in women, competencies in the counseling field, and a commitment to the group served.

The Adult Women's Center, a special service-oriented program for women over the age of twenty-five, would supplement the programs of the existing Student Services Office at Springfield Technical Community College. The Adult Women's Center, staffed by professionals, paraprofessionals and volunteer assistants, would provide the services to meet the academic needs of adult women returning to community college. In addition , the establishment of the Center would demonstrate the institution's commitment to the population, serve as a means to attract adult women to the college, and provide women with a sense of affiliation with the college.

The Women's Center could provide the following kinds of programs and services:

(1) Plan and administer special Adult Women Orientation sessions;

(2) Plan and implement an Adult Women "Buddy System";

(3) Plan and administer career development/life planning assistance programs, including workshops, seminars, credit and non-credit courses, and individual counseling;

(4) Provide a general college information and referral service, including financial aid counseling, health counseling, transfer assistance, job placement, course scheduling assistance, and similar services;

(5) Arrange for tutoring assistance;

(6) Plan and sponsor study skills workshops;

(7) Provide staff and physical location for an Adult Women Support Group;

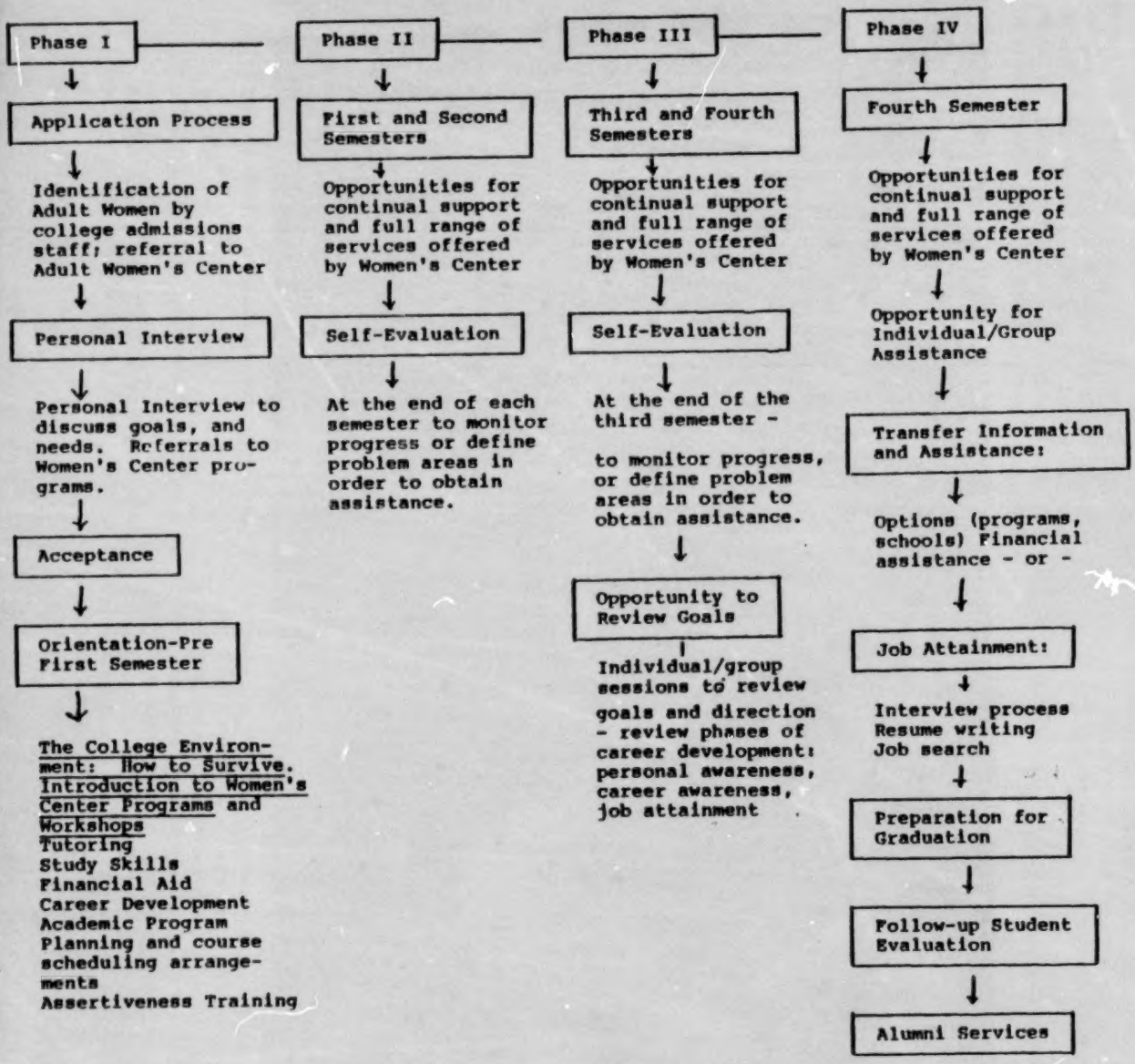
(8) Provide staff for personal counseling services;

(9) Plan and implement a child care program; and

(10) Provide a general information and referral service to community agencies which provide child care, legal assistance, nutrition and health counseling, financial aid counseling, consumer information, and other needed services.

The services of the Women's Center would give adult women the support they need to make the transition from home to school, and to the work world with ease.

MODEL FOR SERVING ADULT WOMEN RETURNING TO COMMUNITY COLLEGE FIGURE I


Phase I
Application Process
Identification of Adult Women by college admissions staff; referral to Adult Women's Center
Personal Interview
Personal Interview to discuss goals, and needs. Referrals to Women's Center programs.
Acceptance
Orientation-Pre First Semester
The College Environment: How to Survive.
Introduction to Women's Center Programs and Workshops
Tutoring
Study Skills
Financial Aid
Career Development
Academic Program Planning and course scheduling arrangements
Assertiveness Training
Phase II
First and Second Semesters
Opportunities for continual support and full range of services offered by Women's Center
Self-Evaluation
At the end of each semester to monitor progress or define problem areas in order to obtain assistance.
Phase III
Third and Fourth Semesters
Opportunities for continual support and full range of services offered by Women's Center
Self-Evaluation
At the end of the third semester -
to monitor progress, or define problem areas in order to obtain assistance.
Opportunity to Review Goals
Individual/group sessions to review goals and direction - review phases of career development: personal awareness, career awareness, job attainment
Phase IV
Fourth Semester
Opportunities for continual support and full range of services offered by Women's Center
Opportunity for Individual/Group Assistance
Transfer Information and Assistance:
Options (programs, schools) Financial assistance - or -
Job Attainment:
Interview process
Resume writing
Job search
Preparation for Graduation
Follow-up Student Evaluation
Alumni Services

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Appendix A
Needs Assessment Questionnaire:
Adult Women

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ADULT WOMEN SURVEY - FALL 1977

Hello! We are trying to learn more about the needs of Adult women who have attended Springfield Technical Community College in order to better serve other Adult Women in the future. We need your help in answering these questions which focus on your academic, personal, and social needs. Please complete this survey today and return it as indicated on the back cover. If you have any questions, please contact Mrs. Ruth McClain, Coordinator for Adult Women Students at 781-6470, extension 3481. Thank you for your help.

DIRECTIONS

Please write your response in the blank space provided to the left of each question. For questions 1 thru 35, please answer using the following:

EXTENT SCALE:

1) to a very little extent
2) to a little extent
3) to some extent
4) to a great extent
5) to a very great extent

WHEN YOU WERE AT STCC, TO WHAT EXTENT:

___1. did you know what you did best?

___2. did you know your weaknesses/limitations?

___3. were you certain about your life's plans?

___4. were you aware of your interests?

___5. did you know your personal values?

___6. did you plan for your education and subsequent career?

___7. were you satisfied with yourself?

___8. had you decided on a particular occupation?

___9. did your family responsibilities limit your choice of career?

___10. did your financial responsibilities limit your choice of career?

EXTENT SCALE:

1) to a very little extent
2) to a little extent
3) to some extent
4) to a great extent
5) to a very great extent

WHEN YOU WERE AT STCC, TO WHAT EXTENT:

___11. did you explore the job market, your interests, abilities, limitations, in planning your education?

___12. did you define your career values into what you wanted to know, what you wanted to do, and how you wanted to live your life?

___13. were you familiar with the variety of occupations in the region where you lived, before deciding on your occupation?

___14. did you know where to go and what sources to use to find information about different jobs?

___15. did you know how to choose a career based upon what is important to you?

___16. did you feel decisions were easy for you to make?

___17. did you make decisions with the help of your family and friends?

___18. did you make all your own decisions?

___19. did you avoid making decisions when they concerned yourself?

___20. did you make decisions quickly without knowing your alternatives?

___21. did you establish priorities for jobs and responsibilities that needed to be done?

___22. did you know how to get the education and training you needed to prepare for a job?

___23. could you make an established goal happen?

___24. did you carefully plan for various phases and events in your life?

___25. did you need to know how to act and what to say during a job interview?

EXTENT SCALE:

1) to a very little extent
2) to a little extent
3) to some extent
4) to a great extent
5) to a very great extent

WHEN YOU WERE AT STCC, TO WHAT EXTENT:

___26. did you need to know how to write a brief history of your school and work background so that an employer could tell if you were qualified for a job?

___27. did you need to know how to ask questions about a job to get the information to determine whether you would like the job or not?

___28. did you feel you needed remedial assistance (tutoring) in reading, writing, and/or math?

___29. did you feel you needed help overcoming bad study habits?

___30. did you feel you needed career counseling?

___31. did you feel you needed counseling to help you understand yourself more fully?

___32. did you feel a child care facility on campus was needed?

___33. did you feel you needed an informal 'support' group of women like yourself?

___34. did you feel you needed financial aid counseling?

___35. did you feel you needed the health counseling service?

PLEASE USE THIS SCALE FOR QUESTIONS 36-41:

1) very dissatisfied
2) dissatisfied
3) satisfied
4) very satisfied
5) N/A: Never Used

WHEN YOU WERE AT STCC, HOW SATISFIED WERE YOU WITH EACH OF THE FOLLOWING:

___36. with your class schedule.

___37. with your home study environment.

___38. with the remedial (tutoring) services offered by STCC.

___39. with your child care arrangements.

___40. with your teachers.

1) very dissatisfied
2) dissatisfied
3) satisfied
4) very satisfied
5) N/A: Never Used

WHEN YOU WERE AT STCC, HOW SATISFIED WERE YOU WITH EACH OF THE FOLLOWING:

___41. with Student Services:

___ personal counseling

___ career counseling

___ financial aid

___ health counseling

___ academic counseling

___ veteran's counseling

Demographic Data — WRITE THE NUMBER OF YOUR ANSWER

___42. While attending Springfield Technical Community College were you: 1) Full-time 2) Part-time 3) Some semesters Full-time, some semesters Part-time

___43. Age (write number)

___44. Marital Status: 1) married 2) divorced 3) separated 4) widowed 5) single; no children 6) single; children

___45. Yearly Income (Personal or Family): 1) below $5,000 2) $5,000-$7,999 3) $8,000-$10,999 4) $11,000-$14,999 5) $15,000-$19,999 6) $20,000 and above

___46. Number of children (write number)

___47. How many years had you been out of high school or college before attending Springfield Technical Community College?

___48. Highest level of education achieved: 1) high school 2) G.E.D. 3) vocational or training school, after high school 4) less than one year college 5) 1-2 years of college 6) 2-3 years college 7) 3-4 years college 8) college graduate 9) post baccalaureate

___49. At STCC what program were you accepted into?

_____

___50. Was this program your first choice? 1) yes 2) no

Demographic Data-Continued WRITE THE NUMBER OF YOUR ANSWER

___51. Did you try to transfer to another program? 1) yes 2) no

___52. Did you graduate? 1) yes 2) no

___53. From what major field did you graduate? (Write in field or N/A if not appropriate) _____

_____

___54. How many credits did you complete? (Write in number)

___55. Did you withdraw from Springfield Technical Community College? 1) yes 2) no

___56. If yes to number 55, for what reason(s) did you withdraw?

_____

_____

_____

___57. Did you transfer from Springfield Technical Community College without actually graduating? 1) yes 2) no

___58. Did you have your own transportation to and from school? 1) yes 2) no

___59. Are you working? 1) yes 2) no

___60. Are you working in the field for which you prepared while at Springfield Technical Community College? 1) yes 2) no

___61. Do you plan to return to Springfield Technical Community College? 1) yes 2) no

If you were to return to Springfield Technical Community College would you:

___62. Need career counseling? 1) yes 2) no

___63. Take a one semester, three credit course in Career Planning and Development? 1) yes 2) no

___64. Take a non-credit, five-six week workshop in Career Planning and Development? 1) yes 2) no

___65. Participate in an "Orientation to STCC" (1 hour) program? 1) yes 2) no

If you were to return to Springfield Technical Community College would you: (continued)

___66. Need personal counseling? 1) yes 2) no

___67. Need a specially arranged schedule so as to fit family and/or work responsibilities into a student role? 1) yes 2) no

___68. Need a loan or financial aid for tuition and school expenses? 1) yes 2) no

___69. Need a loan for living expenses? 1) yes 2) no

___70. Need remedial services in reading, writing or math in order to get into the program you really want? 1) yes 2) no

___71. Plan to complete a degree? 1) yes 2) no

___72. Plan to accumulate credits to transfer and seek a four year degree? 1) yes 2) no

___73. About Springfield Technical Community College, I feel

_____

_____

_____

___74. I do not plan to return to Springfield Technical Community College because _____

_____

_____

_____

Demographic Data-Continued WRITE THE NUMBER OF YOUR ANSWER

___75. Considering what seems practical, what changes would you like to happen at Springfield Technical Community College with regard to Adult Women Students?

_____

_____

_____

Demographic Data-Continued WRITE THE NUMBER OF YOUR ANSWER

___76. Have you ever worked for pay? Please give a brief history.

_____

_____

_____

Many thanks for your help. Please turn this page for mailing instructions.

M. Griffin Murray

The Unknown Citizens: Adult Learners in the Inner City

Introduction

West Oakland is about four miles square. Walking its perimeters, the visitor can identify it easily: two freeways dissect it, the overpasses soaring over expanses of public housing. Decaying houses, vacant lots, dirty streets, and small family stores encircle the downtown area where he might come to conduct his business.

There are some signs of renewal here: the area is one of several into which Community Development money is being poured. The state is constructing another section of freeway through it. The City has restored a few of the faded Victorians and has planted some trees. A few major companies have built modern offices. But somehow this area doesn't encourage the visitor to stay ....

This is the home of 30,000 people, predominantly Black and Spanish sur-named (or Spanish-speaking). Between 35-40% of the population is 60 or older. The median income is $5500; the unemployment rate is 22% (compared to 12% in the City and 7.8% in the nation). In these census tracts, the percentage of people on public assistance ranges from 49% to 81%. It has the highest concentration of poverty in the City.

Given the economic condition of West Oakland residents, it is not too surprisng to learn that only 2% of its population has finished four or more years of college.[1] But more detailed statistics on the educational levels—and higher education needs—of this area are difficult to come by. Statewide studies, such as that conducted for the California Legislature in 1975 reveal that the aged, minorities, and low-income learners represent groups currently under-served by higher education. For West Oakland people too there exist all the traditional barriers to securing higher education identified in this report:

> As many as one in ten California adults who would *like* to continue their education do not feel *able* to pay for it—and the proportion is highest among older, minority, and low-income adults.
>
> After costs, the most frequently mentioned barriers are home responsibilities in second place, followed by job responsibilities, course schedule problems, child care problems, lack of a nearby college offering the desired courses, impracticality of available courses, and transportation problems (Hefferlin *et al*, 1975, p. 12).

The report also states that there is a whole range of psychological barriers to getting a college education facing these populations. These include feelings of personal inadequacy and remembered failure in previous contacts with formal schooling. Feelings of inadequacy are particularly high among minorities:

> In the national CNS survey, twice as many Blacks as Whites mentioned such barriers as "low grades in the past," and "not confident of my ability," as obstacles to further education. In California, the barriers for Mexican-Americans are probably even greater than for Blacks because of the language problem (p. 59).

The local community college district has also generally identified these sub-groups as potential learners.[2] But a thorough analysis of the educational needs of this population has yet to be done. Delivering higher education to an inner-city area presents an interesting assessment problem: a population not previously served has not been studied, and it hasn't been studied because it hasn't been served.

Holy Names College, because of its historical ties with West Oakland, has long recognized the need for an outreach program of higher education to this area. (Before 1958 the College was located in the center of West Oakland). In the Fall of 1975, the College contacted grass roots organizers and the staffs of community centers in West Oakland as the first step in identifying the educational needs of West Oakland people. In the next three months there followed a series of meetings among College staff, West Oakland residents, and the community workers to elaborate on these needs. After these consultations, the College established a vehicle for delivering continuing education services to the inner city and called it the West Oakland Community Leadership Consortium (WOCLC). To finance it, the College secured funding through Title I of the Higher Education Act.

"The Unknown Citizens: Adult Learners in the Inner-City," copyright, 1979 by M. Griffin Murray. Marjorie Murray is a consultant in community education systems in Oakland, California.

To what extent has the College succeeded in giving West Oakland people access to higher education . . . ?

Each year the Consortium serves 300 people directly (or 1% of the population). In 2½ years of operation it has served 800 people. The Project also estimates that, indirectly, it has served another 1000 people, i.e. the family members, co-workers, and neighbors of Project participants. The Consortium has offered 15 classes a year in subject areas determined by community people in collaboration with College staff. The Project has provided child care and transportation to eliminate two of the external barriers to people who wanted to attend these classes.

A welcome result of the Consortium, the coordinators find, is that it is filling an educational void: by bringing the resources of higher education to the community, the College is also supporting other educational services in the area. The Consortium provides an important orientation process for people long removed from formal schooling; their positive experiences in the WOCLC prepare them to participate successfully in established programs of adult education offered by the community college or by the local adult schools. Thus, while Holy Names is extending its own resources beyond the campus boundaries, it is also stimulating Project participants to take advantage of other educational resources in the community. Furthermore, the College has also been developing more fully its brokering function in the community, i.e., acting as the nexus for communication among community groups, social and political agencies, and other educational institutions.

Such an approach to catalyzing the *total* educational resources within the community is in keeping with the conclusions of the 1975 Legislative Report:

> In California, the need for postsecondary opportunities extends across all age groups—from late adolescent to retired adult—and involves not only colleges and universities but all institutions and organizations within the state that educate these groups from adult schools in each school district to proprietary technical institutes, occupational training centers, and even skills classes offered by local parks and recreation departments. Effective educational planning in California must be based on this total demand for learning and supply of learning opportunities (p. 5).

In stimulating the flow of information among community educational groups, the College is working toward several goals: (1) sharing educational resources (space, for example); (2) developing its brokering function as a conduit for information between educational agencies in the community and would-be learners; and (3) helping other adult education programs in the City become aware of the educational needs of this previously under-served population.

This sharing of resources—information, staff, time, classroom space—is important to a California economy still suffering from post Proposition 13 budget cuts. It is important to any educational agency at a time when funding sources—both governmental and private—are evaporating.

This imaginative use of community resources includes also using in certain important roles, the skills of Project participants. From the beginning of the Consortium, these learner/volunteers have helped set Project policy, have participated in the management of the Consortium, and have recruited students for workshops. This harnessing of volunteer time and energy for the Project has meant mobilizing another community resource. It also means that the Project is well on its way toward becoming rooted firmly in the community: the participants now have made a heavy investment in its success.

Some Assumptions Underlying the Methodology for Assessing the Educational Needs of Adults in the Inner City

Concerning the Institution

1. *This methodology assumes that an institution of higher education must take the initiative to assess the educational needs of new populations and to deliver educational services to them.* It must go physically into the community and take an active, ongoing interest in new populations. It must recruit new learners in the inner-city with the same zeal it has recruited high school graduates in the past. It cannot wait for new learners to approach the institution.

2. *An institution of higher education can be the catalyst for assessing total community education and adult learner needs.* It has the ability to make its presence felt in the community and to assume a leadership role in education. Especially it has the strength to set in motion the consortium concept: the affiliation of educational resources to address the educational needs of populations not previously served. In the process of becoming a brokering agent, it can develop a network of interdependent resources which can be re-sorted to meet new social problems and educational challenges.

3. *Decentralizing educational resources and sharing them with other community institutions is cost-effective.*

4. *The vehicle through which higher education can develop its community outreach mission might well be its program of continuing education.* Ordinarily it has already developed a network of community resources: ties with community organizations, for example. Its faculty are often professionals working in the community who can, in turn, identify new student populations through their own professional ties. Because of the kind of work they do in the community as social workers, managers, teachers, businessmen and women, or as counselors, they provide valuable information about community educational needs and the needs of adult learners. And often they can adjust more easily to teaching in a community setting than those faculty members who rarely journey off campus.

Concerning the Process

Among the traditional methods of educational assessment there are two: (1) the instructor (or the curriculum committee) will make a calculated guess about what students need based on his/her past interaction with students; (2)

the instructor will ask the potential student directly: "What is it you want to learn . . . ?" The educational assessment process described below falls somewhere between these two on the continuum, but leans toward the latter method. That is, it assumes that the would-be learner has some conscious notions about what he/she would like to learn, but it also assumes that some educational needs are disguised from both the learner and the instructor.

There are several assumptions underlying this method of student inventory:

1. *The focus of this kind of inventory is the adult learner who, in a supportive environment, is led to do a continual self-assessment of his/her educational needs.* Adults, under the guidance of faculty and community staff, can and do engage in a process of self-discovery. Learners gather information from class and other Project participants, then experiment with new techniques in the world of family and work. They then return to class to report on their experiences and to gather additional information.

2. *In learner-centered assessment the instructor develops materials—and evaluates instruments—in conjunction with the learners.* Such a method insures—more often than not—that appropriate materials and methods are developed for the adult learning group.

Learner-centered assessment illustrates also an important planning principle: *that there is a direct correlation between the planning process and learner acceptance of a program.* This methodology will also illustrate that cost-effective programs will result from collaborative planning.

3. *This method builds on the fact that adults can and want to assume responsibility for their education.* It builds on the fact that the adult learner is capable of assuming more responsibility for developing his/her educational goals than is a child or even an 18-year-old freshman. Assuming his share of responsibility, the adult now creates a triad of shared responsibility with the institution and the faculty (and/or community workers). Thus, the process is an exercise in educational leadership training: for the institution, for the adult learner, for the faculty, for the community organizations. This shared responsibility on the personal level is a reflection of the interdependence organizationally in the Consortium.

4. *The process is evolutionary*, i.e., it does not consist of distributing a single questionnaire, assembling the results statistically, and then developing an entire program out of it. The methodology recognizes that the task of assessing educational needs is one which unfolds gradually as the adult learner recognizes the needs to acquire more (or different) information and to learn new skills.

5. *The process is an interactive one.* The participants in the process are: the adult learners, faculty, community workers, and College staff. Higher education provides the important institutional sponsorship bringing together the participants, setting the stage for interaction, and providing additional technical or theoretical assistance when needed.

6. *It is important in making an inventory to use a mode of inquiry appropriate to the adult learner group.* For example, this target group—low-income adults long removed from formal schooling—consists primarily of auditory and not visual learners. Most of them feel uncomfortable with the printed word; hence, it is inappropriate to use questionnaires for educational assessment. They are, however, quite comfortable with planning sessions in which talking is the chief means of exchange. Identifying the mode of exchange is important because it is another means for creating an atmosphere of trust—and success—where ideas can be freely generated. It is also important because this mode will carry over into teaching methods and into doing further assessments.

7. *For the reasons cited above (1-6), the process used in assessing adult learning needs is essentially described in* The New Interaction Method: How To Make Meetings Work (Doyle and Straus, 1976). It describes in detail (1) how to establish the interactive process in a meeting; (2) the principles for assuring that all participants have maximum input into the communication process; and (3) how to develop consensus within a group. The authors probably did not envision this book as a tool for educational assessment, but in fact the interactive process described there was used for that purpose. (This method can, of course, be used with any socio-economic group. But it is especially useful working with inner-city adults because, unlike other meeting methods—Robert's Rules, for example—it encourages cooperation, not competition. And it encourages input from every participant).

8. *This kind of adult inventory requires a highly-skilled facilitator*, one who can encourage openness and risk-taking in the group, one who can help each participant express his/her ideas and questions in the group. The instructor must be skilled in the interactive method and must be sensitive to the needs of this population.

9. *This method assumes that the planning process, the implementation of the Project (i.e., the instruction), and ongoing evaluation are all means for doing an accurate educational assessment.*

The Methodology

Phase I: The Planning Process.
December, 1975—March, 1976.

1. *Staff of Continuing Education and the Education Department of Holy Names College contacted the staff of community centers in West Oakland.* The latter included teachers, social workers, and advocates representing the interests of the homebound (the aged, for example). They held an information sharing session at which continuing education staff learned from community workers about the educational interests of the proposed client population, i.e. low-income, minority adults ranging in age from 21 to 85. Community workers reported the following possible areas of interest: parenting, leadership training, and resources for senior citizens. This information they had gathered informally through working in West Oakland for two years.

Why did the College approach a community organization in the proposed target area?

A. *Continuing Education contacted these particular community centers because it already had professional ties with them.* Some of the staff had taught community organizers who were members of the religious community operating the College, although their place of residence was West Oakland.

B. *Community Organizations know the people of the area they serve.* They are familiar with the general demography; in fact, oftentimes a community organization will have more accurate or more up-to-date demographic data than a formal census because a community organization has better means of securing it, i.e., more frequent contact (than census takers, say) and the trust of the people they are interviewing.

C. *Community workers are familiar in a general way with the educational needs of the population they serve.* Because they are in close—sometimes daily—contact with community people, they are in an optimum position to inventory other kinds of client needs: education, for example.

D. *Community organizations in a particular geographic area already have an equity in the community which would take a long time for an institution of higher education to build.* In fact, it is sometimes the case that a community is suspicious of the motives of higher education in attempting community outreach. Community organizations which have been working a long time in an area have already developed a reservoir of trust with local people over a long period of time. Higher education—assuming it has equity with the community organization—can borrow some of this.

Community workers can also function as intermediaries between community people unused to interacting with higher education authorities. Their contribution is vital to the interaction process.

E. *Most community organizations have an educational component as part of their own mission.* Thus, they will be receptive to the idea of developing educational programs and services for the people they serve. Coordinating an educational program with an established institution is a way of developing their own educational mission. The principle involved here is that both higher education and community organizations have a healthy self-interest in aiding each other to develop education programs.

F. *Connecting with community organizations means higher education is identifying new resources for fleshing out its intended programs.* For example, classes can be held, not on campus, but in the meeting rooms of community groups. This is an especially valuable point for many state colleges and universities which are "impacted": i.e., which simply have no more classroom space to accommodate adult education or evening programs.

G. *Connecting with community organizations is the first step in building a nucleus of educational information services in the community.* Other agencies can be drawn into this orbit as other adult learners are identified or other educational needs uncovered. Last year alone, twenty-four community agencies and groups were involved in the Project.

2. *A second planning session was convened by community workers.* In attendance were two College staff, four community workers, and eight community people, mostly long-time residents of West Oakland who already had some experience as leaders in their neighborhoods, churches, or community centers. Of these representatives, there were seven women and one man. Six were Black, tow were Hispanic. The youngest was 17; the eldest, 70. The community workers, all Caucasian, were well-known to the West Oakland leaders, having lived and worked as community organizers in that area for two years preceding this planning session.

The meeting was informal. It was chaired by a community worker who briefly sketched the goals of the Project: for the College to develop classes in subjects West Oakland people wanted. She then described briefly the first planning session and the interest areas the community workers reported. The meeting was then opened to general discussion; in particular, community people were asked to provide feedback on the three interest areas reported at the first session.

Community people refined further the ideas generated at the first planning session. Their educational concerns were: English as a Second Language, parenting, parenting skills for bi-cultural parents, leadership training and community organizing, advocacy skills for older adults, and community resources for older adults. The latter included a desire for courses on creative aging and others describing services available in the community for the aged.

3. *Two additional planning sessions were held with the same people in attendance.* Participants came to a consensus that three learning centers would be established: the Center for Parenting; the Center for Community Organizers; the Center for Older Adults. The planners also mapped out the learning goals and objectives for the three Centers; they represented the distillation of the ideas developed at all four planning sessions.

NOTE: All planning sessions were held in the community, at a community center or at someone's home, i.e., on the territory of the learners. This reinforced symbolically the idea that the College was committed to community outreach.

Phase II: Implementation.
September, 1976—the present

1. When the grant was awarded in August, *community workers reconvened community people to determine an appropriate schedule of classes for each Center.* The schedule was based on the needs of the participants.

Community people distributed flyers throughout West Oakland. They also advertised classes informally through their own information network in the community: neighbors telling neighbors, announcements made through churches and block groups, i.e., through the community grapevine. Participants also canvassed by phone.

2. *Faculty were nominated for the Project by community workers and West Oakland residents;* final approval was contingent on their certification by the College. Some were already Continuing Education faculty. Most important, they were people known for their ability to work with this client population, an ability characterized by a sensitivity to the background of these adult learners and thorough skill in the give-and-take of the interactive method. This sensitivity remains an important criteria for the selection of faculty since they must assist continually in the process of assessing learning needs. Faculty, in the process of teaching, test out possible ideas for inclusion in future workshops.

Skilled resource people—knowledgeable in their field and sensitive to the needs of this client group—*were also asked to participate in the Project.* These were professionals from other community organizations and agencies and schools. Sometimes new ideas for teaching or even new workshops emerged through the kinds of discussions they stimulated in class.

Phase III: Continuing Evaluation: Its Role in Assessing Further the Needs of Adult Learners in West Oakland

The Project has developed a number of evaluation instruments and techniques which help in the continual reassessment of learning needs and which inventory new areas of instruction. The evaluation methods were developed over a period of time; they evolved as the learning needs evolved. However, they are described below in the order in which they are currently used in the Project, in chronological order.

1. Each class lasts seven weeks. *At the last session, the instructor conducts a group evaluation of the workshop,* asking each student for a frank appraisal of his/her experience. The Group atmosphere provides a supportive environment for making candid statements. These comments serve as the basis for strengthening current workshops or developing totally new ones.

2. *Each instructor completes a written evaluation assessing both the cognitive and affective growth of each student,* i.e., the ability to absorb and understand the concepts presented in class and the ability to use the learning. The instructor observes performance in class in order to complete the evaluation on cognitive growth.

3. *The instructor and community workers complete the evaluation on affective growth by conducting informal interviews with each student.* Students are asked to what extent they have been able to use the information from class and whether they have discussed the material with family, co-workers, or neighbors. Thus the evaluation assesses to some degree whether or not a student is able to pass the learning on to others.

Community workers are also in a position to evaluate informally because they observe community people acting in the public arena, e.g., some people in the community organizing workshops have presented testimony at city council meetings.

4. *At the end of each quarter, the Consortium holds a Forum* bringing together students from the three Centers, College and community staff. Here participants receive certificates for completing workshops. In the past, Forums have been the means for participants' making spontaneous comments publicly about the workshops; the coordinators are now in the process of developing small groups (led by participants) for these events in order to structure an evaluation session.

5. *At the end of each quarter, the original planning team* (College staff, community workers, and community people) *is reconvened* to evaluate classes and to determine the offerings for the next quarter. At this time, community people representing new educational interests are added to the team. Possible faculty are nominated. After their certification by the College they meet with the planning team to develop the goals and objectives for the quarter's classes.

6. *The Project has hired an external evaluator* to assess (1) the impact of the Project on the community, and (2) the general educational outcomes of the Consortium. The latter is accomplished by visiting classes, attending planning sessions and Forums, and interviewing community workers, faculty, and students.

7. *The Project has made increasing use of community leaders in assessing educational needs.*

In 1975, community representatives provided important information about the educational needs of West Oakland. Since that time they have assumed increasingly greater responsibilities in the Consortium. The Project has now created a vehicle through which community people can make an ongoing contribution to the evaluation effort. Center Coordinators are responsible primarily for the physical management of the Centers (setting up class, for example), while the Instructor Assistants meet weekly with the instructor to which they are assigned. Together they plan classes, and the assistant usually presents a certain portion of the material (for example, role-plays a communication exercise with the instructor). Afterwards they reconvene for a de-briefing session about the workshop.

Both Coordinators and Instructor Assistants are receiving additional leadership training this year, and both will be assisting with the evaluation of the students and of the workshops.

The effects of this new aspect of the Project on assessment and evaluation are:

A. The Project now has a formalized way for instructors and Project staff to receive feedback about the effectiveness and appropriateness of the workshops.

B. Community people now have a formalized way to convey their assessments of instructors, workshops, and their own learning needs.

C. Each instructor now has an official community consultant with whom to plan and evaluate each workshop session. They meet before each session to develop appropriate materials and afterwards for a de-briefing session.

D. Community people now have an additional educational incentive: they have a visible reminder that education can "lead somewhere," i.e. to increased responsibilities and to a paying position.

E. The Project now has a systematic vehicle for adding people to the planning team.

Tentative Conclusions

What Has the Project Revealed About the Learning Needs of West Oakland Adults? A Partial Answer . . . .

Of necessity this is a partial description of learning needs, not only because the Project is new but because this is a population new to higher education. Their needs have yet to be fully described (the fact that there is only limited demographic information on them is one indicator of this). And higher education is only just now gearing itself to provide services to this body of learners.

However, the Project has come to some conclusions about adult learning needs in the past three years. Which ones apply to adult learners in general and which apply only to learners from this socio-economic group is a question beyond the scope of this paper. Such a question can only be studied through a coordinated research program.

1. *The adult learner must be seen in the light of his/her total environment.* The instructor (and the planning committee) must be aware of the internal and external barriers to learning. Family and job pressures and feelings of personal inadequacy often force adult learners to drop class even though they may want to continue.

2. *Adult learning has an experiential base.* Adults bring to learning a wealth of experience, both personal and occupational, which a child lacks. Capitalizing on accumulated adult experience, instructors can emphasize experiential material and exercises in class (e.g., role-playing and simulation games). This method of instruction encourages participants to draw on their own experiences to solve problems and reinforces the concept of self-help: that the instructor is not there to provide answers but to set the stage for the interaction process.

3. *Adults need peer support and adults learn from each other.* Participants also valued the fact that *the workshops taught them experientially the effectiveness of working in a group.* They shared ideas, problems, experiences, personal resources. They served as role models for one another. They discovered that what they had to say others found valuable as a validation of their own experience. As a result, many participants developed increased self-esteem from having their ideas heard and accepted. Group members came to feel they could call on other group members to support them both in personal and public activity, e.g., in dealing with a recalcitrant husband or presenting testimony before the city council for the first time.

4. *The group, its problems and resources, are raw materials for learning.* For example, if a problem arises over where or when to meet, participants are encouraged to solve the conflict themselves, using decision-making and interactive processes learned in class. Thus, instead of solving a scheduling problem administratively, the coordinators urge participants to put newly-acquired skills to use.

Instructors continually focused on the dynamics of the group, encouraging participants to respond to one another. They asked members to evaluate their own behavior in the group and then, by extension, to assess their functioning in other groups, family and work particularly.

At some point also, *adults seem to recognize the importance of groups as a stabilizing force and to develop support groups as they need them.* For example, the women in the parenting class now meet outside of the workshops on weekends to extend their learning experience and to provide each other with support.

The group presents the adult learner with alternatives. One area in which this was most valued was in leadership: group members looked to community workers, to faculty, and to other participants as role models for varying styles of leadership, particularly in solving communication problems.

5. *Adult learners need a learning situation not based on competition but on mutual support and sharing.* Lack of competition leads to increased willingness to share resources and to take risks. (The implications of this for adult learners from other socio-economic groups has yet to be explored). Cooperation and the sharing of resources is the basis for problem-solving, learning, and the achievement of goals.

6. *Adults are attracted more to active rather than to passive learning.* Adults take a pragmatic approach to education. Instead of listening to lectures, they would rather test out and experiment with ideas in class and in the laboratory of daily experience. They have little patience with theorizing which has not evolved out of concrete experience. After all, many are seeking an education to solve concrete problems, and many are making sacrifices to acquire it. They can test out very quickly whether a new communication technique works at home with a three-year-old or with an aging parent.

Epilogue

The West Oakland Project demonstrates two things: there is a need for programs of this type for under-served populations; and the kind of planning process used is a cost-effective way to develop such programs.

If a democratic society requires trained, well-informed citizens to participate in its processes, then surely higher education has an obligation to see to it that educational services are extended to the under-served. If a community wants to solve its problems in a cooperative, comprehensive, and systematic way, then its citizens must be trained in cooperation, negotiation, and communication skills. This is simply a good use of under-used human resources, just as the identification of under-utilized educational resources in the community makes good fiscal sense.

Higher education alone cannot educate all the citizens in the community, but it has the imagination, the strength, and the prestige to mobilize the total educational resources in the community which will make education possible. It can provide the research resources and the theoretical framework for assessing community problems and the educational resources to solve them. It can supply the required leadership. It can demonstrate that cooperation and the sharing of resources organizationally is the basis for problem-solving. Setting aside competition, *it can provide an example* in community problem-solving.

This new alliance of higher education and community resources will have some happy results if the West Oakland Community Leadership Consortium is any proof. Developing programs in collaboration with specific groups of adult learners insures that there is a market for the programs developed.(In current educational planning this is not always the case).

There are sound practical reasons why higher education should engage in this kind of educational planning,[3] but there are ethical reasons as well. In a report prepared for the California Postsecondary Education Commission, the authors assert that:

> There is a deep-rooted and historically sound expectation in this country that education should serve the common good as well as individual needs. Coping with social change and its consequences has become for some a full-time occupation. The idea that our citadels of learning should remain outside the mainstream of efforts to help cope with social change is likely to receive short shrift from citizens engaged in a struggle for survival. Traditional education has not adequately met this need. All citizens are candidates for continuing education. It is time for our institutions of higher education to reassess their priorities and to generate new ways of serving the common good (Farmer *et al*., 1975, p. 6).

Notes

1. Figures from this section have been compiled from a number of sources: (1) The 1970 U.S. Department of Commerce Census for the San Francisco/Oakland Metropolitan Statistical area: Housing and Census Tracts. (2) The 1977 Special Census conducted by the U.S. Department of Commerce in cooperation with the City of Oakland Planning Commission. (3) Grant Application from Merritt College, Oakland, California, "Strengthening Developing Institutions," submitted to the U.S. Department of Health, Education, and Welfare, February 2, 1979. (4) City of Oakland, Mayor's Commission on Aging. (5) City of Oakland, Office of Community Development. (6) West Oakland branch of Oakland Community Organizations, an alliance of community associations. (7) Oakland In Transition: A Summary Of The 701 Household Survey, completed by the Survey Research Center, University of California, Berkeley, 1969.

2. Master Plan Project for the Peralta Community College District: Educational Services, Alternatives for the Future, 1975, p. 3. Suzanne Adams, editor.

3. Operating with an annual budget of $30,000 ($9,000 of this in-kind services rendered by the College), the Project has delivered higher education to the inner-city at a cost of $70 per student per year.

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Helen Veres, Joseph Mangano, Gerald Freeborne

Information and Involvement: The New York State Continuing Education Needs Assessment

Introduction

Throughout the 1970's the ever-increasing numbers of adults returning to educational institutions has made continuing education the fastest growing part of education. Between 1969 and 1975, continuing education enrollments throughout the country increased by 31 percent—a rate of growth two and one-half times greater than the increase in the adult population (Boaz, 1975). This trend stands in sharp distinction to the plummeting enrollments found in schools and colleges serving youth.

This national trend toward greater participation by adults in continuing education activities has been equally evident in New York State. In the first six years of the decade, enrollments in continuing education programs sponsored by the public schools grew by approximately 200,000 persons to over 900,000 participants. This total reflects only a portion of the adults actually involved in learning activities. Many other individuals were participants in activities provided through a variety of other institutions and agencies, including colleges and universities, business and industry, community organizations and home instruction.

Although such data on participation by adults and the range of services presently available in continuing education are impressive, there are still large numbers of people who do not participate in any type of organized learning activities. In this country participation in adult education is voluntary—individuals may choose to take part or not. As a result, previous studies of participation in continuing education activities indicate that certain groups engage in educational activities provided for adults in numbers greater than their proportion of the population (Johnstone and Rivera, 1965; Carp, Peterson and Roelfs, 1974).

Clearly, in spite of existing evidence that nearly all adults may be considered potential participants (Tough, 1971), many individuals do not or cannot take advantage of existing continuing education opportunities. Not enough is known about the obstacles and barriers which prevent these potential learners from participating, nor is there adequate planning information about the learning needs of present participants. Nevertheless, improvement and extension of continuing education services depends, in part, upon a two-way exchange of information between the learners and those associated with providing adult learning activities. This flow of knowledge and information is a complex process involving such factors as the potential learner's awareness of his or her own educational needs and interests and the existence of appropriate learning activities for the satisfaction of these needs. Similarly, continuing education providers require current and detailed information about client needs and interests in order to make program and policy decisions; they also must bring present and proposed program offerings to the attention of the potential learners. In this process, adequate information is an essential link in facilitating the actions and decisions of learners and providers of continuing education services.

In New York State, the State Education Department, Division of Continuing Education recognized that such expanded information would be a necessary first step in improving the delivery of continuing education services to present and potential learners. This concern for better information about the needs of the adult learner and the services provided by the existing delivery system for continuing education contributed directly to the development of a comprehensive study—an effort directed to supplying improved information for continuing education planning. The study consists of a three-part data collection effort carried out over 1975-76: (1) the assessment of the continuing education needs of New York State adults, (2) an examination of the present delivery system for continuing education in the state, and (3) an assessment of the in-service training needs of continuing education faculty and administrators.

The basic objectives of the needs assessment effort were to identify the continuing education needs and barriers to participation of adults in New York State (excluding New York City, currently the site of a special survey effort) and to utilize the information obtained as a basis for state and regional decision-making concerning program development and administration in continuing education. These objectives were to be attained through the cooperative efforts of a variety of individuals who ranged from professional educators to lay citizens and included representatives of state and local educational institutions, the State Education Department and community agencies. This co-

This paper reports on a study conducted by Helen C. Veres, Research Associate at Cornell University, and her colleagues, Joseph Mangano and Gerald Freeborne, for the New York State Department of Education.

operative effort was viewed as a key element in the success of the needs assessment effort. Not only would it be difficult to carry out a large statewide needs assessment without the assistance of many different individuals but the involvement of the variety of persons from the potential target audience in all phases of the data collection effort from planning to dissemination would help to insure a commitment to use the study results. In addition, since cooperation and coordination among institutions and agencies offering continuing education services is frequently cited as desirable in reducing duplication of effort or competition among providers, the involvement of program administrators in a region in data collection, analysis and interpretation of results for their local area would facilitate contact and information exchange among providers. This further increases opportunities for survey results to be employed in decision-making and planning. This strong conviction that the potential audience should be deeply involved in the survey process affected other decisions concerning how the needs assessment activities should be carried out, especially decisions on management, total number of survey respondents, sampling plan, and reporting and dissemination of results.

Design of the Needs Assessment Project

The assessment of learning needs of New York State adults was sponsored by the New York State Department of Education, Division of Continuing Education through funds provided under the Adult Education Act, Title VI. In addition to a project manager who was a State Education Department staff member, representatives of two other institutions were involved in the overall planning and implementation of the needs assessment project. Because of previous experience in conducting a similar study of adult needs in central New York, the Institute for Occupational Education at Cornell University undertook the planning and execution of the survey of adults. Other related activities, including development of the Staff Development Survey and planning and administration of project workshops and meetings, were carried out by the Two-Year College Development Center at the State University of New York at Albany. Each university unit had a separate project director and staff members and scheduled meetings provided for coordination and communication among the various parts of the project.

In planning the survey of adult needs, the project management agreed that the general population should be surveyed and that personal interviews would supply the most valid and useful data for decision-making. In addition, since the results of the study were intended for use in planning at the regional and sub-regional levels, adult educators in local communities were to be involved and data were to be analyzed and reported to address local planning needs.

The Management System

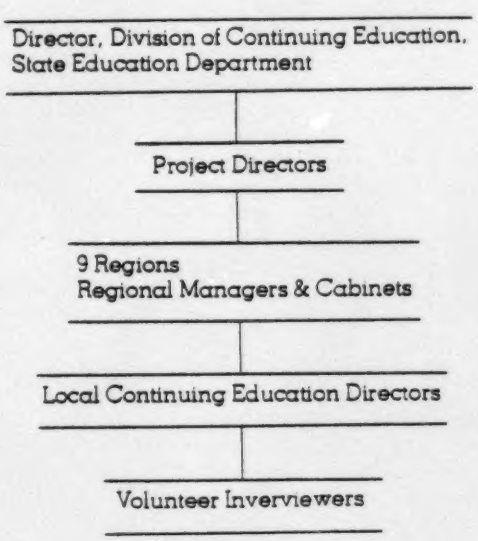
The magnitude of the problem of gathering data at the local community level while keeping the project cost-effective, necessitated the development of a management plan organized according to geographical regions of the state. Since the State Education Department was the project sponsor and in its official capacity maintained contact with administrators in local school districts, it was decided that this existing structure should be employed for survey purposes. This would facilitate the participation of many professional educators while avoiding the creation of a costly new structure to administer the needs assessment survey.

The management plan involved an alliance of local school districts, Boards of Cooperative Educational Services (BOCES) and two-year colleges. At the time of the survey, with the exception of New York City and the remaining four largest cities, the state was divided into forty-five (45) (now 44) supervisory districts, each encompassing within its territorial limits a share of the local school districts. These 45 supervisory districts would compose the smallest reporting units for survey results. Although this structure officially applies to the administration of public schools within the state, for the purpose of the needs assessment survey, the two-year colleges located within a district's geographical limits were included.

The state was also divided geographically into nine regions, with each region encompassing a varying number of the supervisory districts. A regional manager was appointed for each region to supervise and coordinate the adminstration of the survey. These managers were directors of local programs who had evidenced deep interest in the development of continuing education and possessed leadership and managerial capabilities.

Figure 1

Needs Assessment Management System



Each regional manager subsequently developed a cabinet or committee representative of the supervisory districts within the region. Committee members were chosen from among the local Directors of Continuing Education in the public schools and BOCES facilities, as well as the Deans of Continuing Education in the public two-year colleges. The members of these committees assumed the management responsbilities for their supervisory districts working with other program directors at the local community level. In school districts which did not offer continuing education, the Director of Continuing Education of the BOCES or another member of the committee contacted the Chief School Officer of that community to acquaint him with the project and to seek his help.

Management responsibilities included identification of an adequate number of volunteer interviewers to conduct the survey, administering the training program for these volunteers, and distributing, collecting and returning the survey materials. To carry out these tasks, each regional manager administered a small budget ($1500) to cover such necessary expenses as postage, mileage costs of committee members attending meetings called by the regional manager, office supplies and other special costs related to the survey.

The Survey Interview

In the Fall of 1975, a survey instrument to obtain information from adults about their perceived learning needs was developed and field tested by staff of the Institute for Occupational Education at Cornell University. Insofar as it was possible, this instrument was constructed to elicit data comparable to other regional and national studies of continuing education. These studies include the national data gathered in 1972 by the Commission on Non-Traditional Study (Carp, Peterson and Roelfs, 1974) and the several regional studies conducted in New York State under a grant of funds from Title I of the Higher Education Act of 1976 in cooperation with the New York State Education Department.

The instrument was designed to obtain information from adults in personal interviews covering the following major areas:

1. Background information on the adults surveyed.
2. Past participation in continuing education activities.
3. Expressed learning interests.
4. Obstacles to participation in continuing education activities.
5. Preferred conditions for participation in continuing education.
6. Potential for utilization of counseling and advising services for adults.

The questions based on each of these areas were constructed in a multiple choice format with answers recorded on a machine-scorable form. The majority of these questions had precoded response categories with options such as "other" or "don't know" included to allow for answers not specified among the choices. An interviewer summary sheet supplied space to record other comments or special information from the survey participant, e.g., reasons for incomplete interviews, number of persons who declined to be interviewed. This method was considered to be the most efficient way of handling the vast amount of survey data while permitting the recording of special circumstances among the large sample population.

The survey interview questionnaire was reviewed by various professionals and program administrators in continuing education across the state. Special attention was devoted to the identification of problems in wording of questions and response categories, clarity and sequencing of questions, and adaptability to the various geographic areas of the state. Minor revisions were made in the questionnaire as a result of this review.

Next, a pilot test of the instrument was conducted with a small sample of adults of various ages and educational backgrounds. Approximately 50 interviews were conducted with adults in the central portion of the state to identify any additional problems with questionnaire content or method. Several further revisions were made in the wording of questions and responses based upon the results of this limited pre-test. An estimate of the time required to conduct the interviews was also obtained. The average interview took about one-half hour although actual times ranged from 20 to 45 minutes per interview.

Interviewer Selection and Training

The need to collect data in the various local supervisory districts throughout New York State made it necessary to select and train large numbers of interviewers to complete this enormous task. The regional manager, cabinet members and local directors of continuing education programs identified potential interviewers according to several criteria including interviewer's representativeness of the population to be interviewed, familiarity with the interview area and willingness to participate in training.

Across the state approximately 2000 persons were identified and trained as interviewers. All were volunteers who contributed their efforts and approximately 8-10 hours of time without pay on behalf of the local continuing education program. This impressive contribution of time was essential in collecting the vast amount of data while keeping the costs of the survey within reasonable limits.

Each interviewer training session lasted approximately three hours and provided extensive detail on the data collection process. This encompassed the description of the purpose and objective of the research, a question-by-question review of the interview questionnaire, a video tape of sample interviewing technique and practice interviewing. In addition, each volunteer received a 13 page manual prepared by project staff which supplied general information on survey interviewing and specific procedures for completing the mark-sensing answer forms. In order to insure maximum cooperation from community residents, interviewers were also furnished with an identification card stating the interviewer's name, the purpose of the survey and an endorsement by the local Chief School Officer. Also, regional team members were asked to publish information about the needs assessment's purpose, how, where and when it would be conducted, and other relevant details in local newspaper or school newsletters in advance of actual interviews.

The Sample of Adults

For this survey of continuing education needs, the population to be sampled included all persons age 16 or older who were not currently full-time students. Also, since local areas would receive the needs assessment results to use in local planning and decision-making, interviews would be conducted in the 45 school supervisory districts across the state. Each of these districts was assigned a total of 700 interviews, apportioned among its component school districts according to population.

The regional manager and team were furnished with detailed census information about the residents of the area's school districts. To facilitate use of interviewer time and avoid extensive travel, the required number of interviews were apportioned in clusters of five interviews. Using the offical census or school district map, three clusters were to be randomly distributed within the school district boundaries.

To further insure that the sample would be representative of the state's population, interviewers were given special instructions. Interviewers were instructed to alternate interviews between males and females and to conduct interviews at different times of the day. In several districts with large non-English-speaking populations, the use of bilingual interviewers enabled these residents to be surveyed.

The sampling plan resulted in a total of 20,486 usable interviews, drawn from a population base of 10,342,084 upstate New York residents (1970 Census). Of this total, 5,843,416 persons were age 25 and over (57% of the upstate population) and could be expected to constitute a potential audience for continuing education services.

Analysis and Findings

Meeting the specific learning needs of a particular adult in a community is a difficult task. Since adulthood encompasses two-thirds or more of the average life span, the adult population consists of individuals with diverse characteristics, with differing perceptions of why and what they want to learn, as well as with different learning styles and basic abilities. Although these individuals may share similar learning needs with others of like sex, age, educational background or other common characteristics, the challenge to the educational system lies in the development of learning activities which are not only personally satisfying but which also respond to societal needs for an educated citizenry.

Assuming that a desired learning activity is available, whether or not an adult can participate in the activity may depend upon a host of other factors such as when and where it is offered, its costs, the individual's motivation, home and family responsibilities or other barriers. Hence, the interview data obtained from the over 20,000 adults in the state were analyzed for various subgroups, regions and local communities as well as for the entire sample. Special emphasis was given to the identification of trends and providing information for planning services.

Results of the Statewide Needs Assessment

In general, most adults indicated an interest in learning. Approximately 94% of the respondents identified one or more subjects of personal interest with half of these adults naming five or more learning interests. Only 6% did not name an interest. However, these interests as well as the barriers to learning and preferences for location, times and other conditions related to delivery of services vary according to the demographic characteristics of the potential learner, such as age, educational background, sex or family income level (New York State Education Department, 1977).

Table 1

Learning Interests Most Frequently Selected by Adults

(N=20,486)

Interest	%	First Choice Interest	%
Arts & Crafts	33.2	Arts & Crafts	7.6
Physical Fitness	27.5	Business Skills	5.4
Sports and Games	26.5	Building Trades	4.3
Home Decorating	24.3	High School Equivalency	3.8
Gardening	23.4	Nursing	3.8
Sewing	22.7	Industrial-Technical Skills	3.7
Business Skills	20.5	Sewing	3.4
Cooking	19.8	Psychology	3.2
Travel	19.6	Sports & Games	3.0
Psychology	19.3	Home Repairs	2.9

Although the choices of adults reflect a wide variety of learning interests (Table 1), these choices and the reasons given for the selection of a first choice learning interest differed according to the adult's life situation or special characteristics as a potential learner. These differences must be considered in devising any system designed to meet educational needs of adults.

A majority of adults with family incomes of $7,000 or less per year said that their primary interest was job-related.

Adults without a high school diploma ranked achieving high school equivalency highest among their interests. For adults with eight years or fewer of formal education interest in high school equivalency was coupled with the acquisition of basic educations skills. Most (75%) of the adults who chose high school equivalency as their primary learning interest indicated that their motive for study was job-related.

Members of minority groups tended to have common learning interests which cut across various ethnic or racial group memberships. These interests reflected the respondent's previous education, family income level, status of employment and place of residence.

Adult learning interests differ by age level. Respondents under age 25 had the greatest desire for credit, diplomas or other forms of credentials. Older or retired adults indicated a greater interest in learning for personal development or for avocational reasons.

Men and women expressed differences in learning interests. However, over half of the women interviewed cited job-related reasons for their learning choices.

For a variety of reasons, many adults do not participate in organized continuing education activities. Some adults prefer to pursue their interest through informal or independent learning activities. The results of the statewide needs assessment which address the problems of access and barriers to educational opportunities indicated that:

Participation in continuing education activities is related to the respondents' educational background.

Almost one-half of all adults surveyed felt that they do not have enough information about continuing education opportunities in their local communities. Among lower income rural adults, as well as adults in large metropolitan areas, the number reporting lack of information was even higher than the rest of the sample.

Adults feel that counseling services would be helpful. Adults with less than a high school diploma, those with low incomes and younger persons appeared most likely to use counseling services for assistance with job-related programs or for financing their studies.

Middle income adults showed a preference for learning in traditional educational settings. Adults with less than a high school diploma showed a greater tendency than adults with more formal education to favor learning at home, individual instruction and use of community settings as learning sites.

Over half the middle income adults named one or more of the following barriers to continuing education participation: inconvenient scheduling of course, classes located to far away, no courses offered in their area of interest, or classes filled before the individual could register. Lower income adults cited other types of barriers which were primarily financial in nature (Table 2).

Nearly two-thirds of continuing education administrators and 90% of the teachers surveyed, who provide the local leadership for this system, are employed part-time. This results in a fragmented system characterized by learning opportunities which vary widely from area to area and institution to institution.

Table 2

Most Frequently Identified Barriers to Participation

Total Sample (N=20,486)		Urban Poor (N=805)	
Most Important Barrier	%	Most Important Barrier	%
Home responsibilities	12.1	Cost of tuition	15.0
Cost of tuition	9.5	Home, other responsibilities	7.5
Class schedule inconvenient	8.7	Need for baby sitter	6.1
No class offered	8.5	Class schedule inconvenient	5.9
Job responsibilities	6.1	No class offered	5.2
Too far away, no transportation	4.1	Too far away, no transportation	4.6

The Dissemination Process

Since educators must be aware of information about the needs of adult learners in order to respond adequately to them, a strategy for disseminating such information was a necessary step in implementation of needs assessment findings and recommendations. Since research findings published in lengthy printed reports often are overlooked or do not reach the appropriate decision-makers, an extensive dissemination process was an essential step in providing the maximum opportunity for the results of the needs assessment study to receive application in the field. This process would include consultation services as well as workshops and meetings where time would be allotted for interpretation and discussion of state and regional data.

The dissemination process was intended to reach as many people as possible across the state, particularly persons with responsibility for adult and continuing education programs and individuals whose public or community role is related to decisions about continuing education. Throughout the process, the regional organization developed during data collection was used to complete regional reports of needs assessment data to serve as bases for discussion and planning within the region. Adult educators from the public schools, Boards of Cooperative Educational Services and community colleges were encouraged to maintain this structure to provide a mechanism for continued communication and coordination.

Preliminary efforts at dissemination began with two three-day workshops for regional management teams. These two workshops, held in the spring, focused primarily on the content and implications of the results of the survey of in-service training needs of continuing education staff members. In the fall, another three-day workshop was held to acquaint each management team with the data and initiate the development of a summary report of needs assessment findings and their implications for the region. Following this workshop, staff from the Two-Year College Development Center conducted planning sessions in each region to arrange local workshops to be held during the spring.

The purposes of these workshops were to disseminate the statewide needs assessment report, review regional data and the working draft of the regional report, create a support base of informed decision-makers within the continuing education delivery system, identify the strategies for implementing recommendations centered in the regional report and develop a cooperative work plan for the delivery of continuing education activities within the region.

Each of the nine workshops opened with a dinner meeting to which state and local decision-makers were invited. These included members of the state Board of Regents, state legislature, local elected officials, local school district Board of Education members, school superintendents, college and university administrators as well as representatives of the local news media, Cooperative Extension, library services and community agencies or service organizations with interest in educational services for adults.

In succeeding workshop sessions local directors of Continuing Education discussed the draft regional report, revised or amended it and developed their plan for final completion of the task. Following the workshop, a technical consultant worked with the regional teams to incorporate the revisions and recommendations and eventully, to edit the final version of the report. The resulting reports were printed and sufficient copies returned to the regions to use in planning and regional decision-making.

Evaluation

Both the data collection and dissemination phases of the project were subject to an independent process evaluation conducted by an evaluation team from the State University of New York at Albany which monitored all three research components of the needs assessment project. Members of the team visited survey sites, interviewed project staffs and members of regional teams, attended interviewer training sessions and dissemination workshops and administered evaluation instruments.

Feedback from the evaluators throughout the conduct of the project provided information on strengths and weaknesses of the research and dissemination processes. An evaluation instrument administered to a random sample of participants at the dinner meeting session of the regional workshops indicated that the majority (65%) of the state and local decision-makers were favorably impressed with the data obtained in the needs assessment effort; nearly all (93%) of the respondents felt that these data will assist in professional decision-making.

Implications and Utilization

Although the data collection and statewide dissemination phases of the needs assessment survey have concluded, a number of the effects are still being felt. At the state level, a large data base has been available for systematic study to provide a rationale for decision-making about adult and continuing education in New York. The Division of Continuing Education of the State Education Department identified a number of elements in a plan to utilize the obtained data for administrative decisions and legislative recommendations. This plan, based on findings from the three research studies, included:

1. Identification of all positive significant components of the various continuing education delivery systems, (e.g., special instructional techniques geared exclusively to adult learners or curriculum modules designed for a variety of learning environments) and development of an administrative model for the coordination of these components.

2. Design of a comprehensive management information system to provide data for rational decisions and to suggest appropriate modifications of the administrative model. This system would undertake tasks such as clarification of standardized reporting forms, guidelines for uniform procedures and periodic feedback to *all* delivery systems in the continuing education field.

3. Development of a position paper on the financing of continuing education programs, identifying all fiscal resources presently available to support educational services for adults, areas where financing is inadequate for current needs, and specific recommendations for legislative consideration.

4. Development of a strategy for upgrading all personnel who seek to work with adults including pre-service and in-service training, programs leading to desired credentials and innovative staff development activities. To further assist in training people to work with adults, colleges and universities will be encouraged to develop undergraduate and graduate courses in this area.

5. Construction and implementation of a plan for more adequate information, referral and counseling services for the adult learner.

6. Maintenance of local and regional involvement and communication.

A variety of publications describing needs assessment results have been developed and provided to continuing education program administrators and staff and in-service activities have been conducted to further explore the regional implications of the data and their local applications. Several regional organizations have used such data to assist them in coordinating existing continuing education programs. Various local districts have employed survey findings to suggest alternative approaches to the delivery of learning activities and to target services and information to the needs of special groups of learners.

Consequently, the beginnings of regional cooperation and regional structure have been established across the state. The efforts of educators in the field, volunteer interviewers and others who contributed to the planning, collection, interpretation and dissemination of the needs assessment data have resulted in providing an extensive data base for planning at moderate costs.

However, this massive undertaking was not without its difficulties and inconveniences. The involvement of so many different individuals in numerous locations across the state multiplied problems of communication and coordination in carrying out the survey, and at times the unpredictable winter weather of upstate New York delayed data collection and forced re-scheduling of meetings. However, through the planned cooperative effort, the stated needs assessment objectives were achieved.

The findings from the needs assessment point to the necessity for flexible programs which can adapt to individual needs and the needs of special target populations. Consideration of such needs raises the further problem of additional expense incurred in providing such flexibility, in addressing programs to the needs of special subgroups and in offering the special information, referral and counseling services desired by adult learners. This is particularly critical since, although some state and federal funds are available to provide programming for special groups, the present continuing education system in New York State is largely self-supporting. Since cost of tuition is already one of the most highly ranked barriers to participation for all adult groups and the top-ranked barrier for lower income adults, increases in the costs of participation in learning activities may have adverse effects upon enrollments. Special attention to the problem of financing continuing education is required in order to find solutions which can meet the diverse needs of adult students.

In general, the data gathered in these interviews with over 20,000 adults in New York State form an information base for planning services for continuing education learners at both state and regional levels. Such information is a necessary first step in attempting to meet the needs of adults for basic occupational skills, job upgrading and retraining, as well as responding to the rising demands for a variety of educational services.

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Appendix A
Statewide Needs Assessment Questionnaire

CONTINUING EDUCATION NEEDS ASSESSMENT PROJECT

NEW YORK STATE EDUCATION DEPARTMENT

DIVISION OF CONTINUING EDUCATION

ALBANY, NEW YORK 12234

In cooperation with

Institute for Research and Development in Occupational Education

Department of Education

New York State College of Agriculture and Life Sciences

Cornell University

Ithaca, New York 14853

Instruction to Interviewers:

In top left hand box mark the appropriate numbers for the District in the DIST lines and your interviewer identification in the IT lines. These numbers will be given to you by the Project Manager in your district. The line marked A refers to the area where you will be interviewing. Mark the box that most closely describes the area where the respondent lives.

Area

1. City or urban area
2. Suburb
3. Town or village
4. Farm or other rural area

Be sure you have your identification card with you.

If a person says he or she has already been interviewed, thank him or her and go on to the next person.

Read all regular print to the respondent. Read words in parentheses ( ) if they help explain the meaning. Do not read any directions in italics (the slanted words).

Mark on the answer sheet in pencil.

Use a separate answer sheet for each respondent. Mark on it in pencil with a heavy mark over the letter. Erase mistakes. Do not make any extra lines, drawings or writing. Do not fold the answer sheets, because they will be machine scored. The numbers on the answer sheet are the same as the numbers on the questions. On the answer sheet there are extra letters for some questions. Do not mark the extra letters.

If during the interview a respondent doesn't understand a question, read it again. If the respondent still doesn't understand the question, mark "don't know" or "no answer" letter and go on to the next question. Don't try to interpret the meaning of a question.

Hello, my name is _____. I am helping with a community survey conducted by the New York State Education Department and the schools in this area. *Show your ID card and then continue.* We hope to find out more about people's educational needs and interests. The answers of people like yourself will assist us in planning future programs for adults. Everything will be kept strictly confidential. We are not asking for the name of any person we interview. *If you think the person may be less than 16 or may be a full-time student, add:* If you are at least 16 years of age and are not now a full-time student in school or college, I would greatly appreciate a little of your time.

Note to Interviewer: If person is less than 16 or is attending school full-time, do not interview. Ask if there is someone else in the household who could answer the questions.

First I'd like to know:

1. How many years have you lived in this community? Choose the answer that applies to you.
   Mark only one answer
   a. Less than 1 year
   b. Between 1 and 5 years
   c. More than 5 years
   d. *No answer*

2. Are you:
   Mark only one answer
   a. Single
   b. Married
   c. Separated, divorced or widowed
   d. *No answer*

3. What is the highest grade in school you have completed? Let me read the list, then choose one.
   Mark only one answer
   a. No formal education, self-educated
   b. 8 years of school or less
   c. Some High School (9th through 11th grades or part of 12th grade)
   d. High School Diploma or High School Equivalency Diploma
   e. Business or Trade School
   f. Some College (includes 2-year college diploma, 1 to 3 years of college, or part of the 4th year)
   g. College degree or more
   h. *No answer*

4. Since leaving school, have you received instruction in any subject or skill? Here are some examples of what we mean: Adult or continuing education classes, college courses, correspondence courses, on-the-job training, private lessons, TV courses, mini-courses, classes in a church or club.
   a. Yes - *Go to Question 5*
   b. No - *Go to Question 10*
   c. *No answer*

5. When was the last organized course or program you took? Choose the answer that applies to you.
   Mark only one answer
   a. Taking it now or within the past year
   b. 1 to 3 years ago
   c. 10 years ago
   d. More than 10 years ago
   e. *No answer*

6. Where did you go for this last course or activity? Let me read the list and then choose one.
   Mark only one answer
   a. Place of employment - *Go to Question 8*
   b. At home - *Go to Question 8*
   c. A community building such as a library, church or community center - *Go to Question 8*
   d. An education building such as a school, or college, or adult education center - *Go to Question 7*
   e. Other
   f. *No answer*

7. In what kind of school building was the class held? Choose one.
   Mark only one answer
   a. Elementary, junior high, or high school building
   b. BOCES building (area occupational center)
   c. Vocational or business school building
   d. Adult education center
   e. Two-year college building (Community or Ag & Tech)
   f. Four-year college or university building
   g. Other
   h. *No answer*

8. Did you take this course to help you get a new job or to advance in your work?
   a. Yes - *Go to Question 10*
   b. No - *Go to Question 9*
   c. *No answer*

9. Which one of the following six reasons was the most important for taking the course? Let me read the list and then choose one.
   Mark only one answer
   a. Personal enjoyment
   b. Learn skills useful for daily life or saving money
   c. Meet people or be with friends
   d. Learn for sake of learning, become better informed
   e. Help people
   f. Enrich family life
   g. Other
   h. *No answer*

10. Whether or not a person has received any formal instruction, people have many different interests. We would like to find out what sorts of things adults in the area want to know more about or do better. Here is a list of many interests. *Give respondent HANDCARD #1 (He keeps it until Question 11 is answered).* If you had your choice and if you didn't have to worry about cost or other responsibilities, which subjects or skills interest you enough to want to learn more about them? You may choose more than one. Tell me the numbers of the subjects you choose. *Mark each interest selected on answer sheet. IF RESPONDENT REPLIES "NO INTEREST", MARK '43' FOR QUESTIONS 10 and 11, COMPLETE QUESTION 12, AND SKIP TO QUESTION 43 (p.10).*

11. Which one are you most interested in? *Interviewer mark first choice in column for Question 11. If respondent can't select a first choice, mark 44: no first choice.*
    Mark only one answer
    y. *Other (If the choice was "other")*
    z. *No answer*

SUBJECTS OF INTEREST

(Used in Questions 10 & 11)

1. High School Equivalency preparation (G.E.D.)
2. Citizenship, English as a second language
3. Basic Education such as reading, writing and arithmetic skills
4. Home Repairs
5. Building Trades such as plumbing, electrical work, masonry and carpentry
6. Industrial Trades and Technical Skills such welding, tool and die making, graphic arts, auto mechanics, TV repair, drafting
7. Protective Services such as fire, police, security guard
8. Service Occupations such as hairdressing, chef training
9. Business Skills such as typing, accounting, bookkeeping
10. Computer Science such as data processing, programming
11. Investment such as money management, insurance, savings plans
12. Management Skills such as business, administration, hotel management
13. Sales and Advertising such as real estate, public relations
14. Travel such as planning trips to other countries, travel agent
15. Arts and Crafts such as painting, photography, weaving, pottery and woodworking
16. Performing Arts such as music, drama, dance
17. Health and Safety such as first-aid, baby care, water safety
18. Occult Sciences such as astrology, ESP, magic
19. Driving, Flight Training: car, truck, heavy equipment, plane
20. Gardening such as growing vegetables, flowers
21. Home Decorating such as interior design, flower arranging
22. Sewing including design and fashion
23. Cooking including food preservation and nutrition
24. Parent Education: family relationships, family planning, child development
25. Planning for your retirement
26. Consumer Education such as buying, credit
27. Architecture
28. Engineering: civil, electrical, mechanical
29. Education: teacher training, administration, curriculum planning, guidance
30. Law including law for everyday living, legal rights
31. Nursing
32. Agriculture: farming, such as dairy, orchard, poultry, crops, animal science
33. Religion
34. History, Government, Current Events
35. Languages such as French, German, Spanish, Chinese
36. Science and Math: biology, chemistry, algebra, geology, etc.
37. Psychology: psychology for everyday living, counseling, human behavior
38. Social Sciences: sociology, social work, archeology, anthropology
39. Humanities such as philosophy, great books, art and music appreciation
40. Nature Study: ecology, conservation, ornithology
41. Physical Fitness: exercises, self-defense, body-movement
42. Sports and Games such as golf, bridge, swimming, boating
43. *No interest* y. *Other* z. *No answer*

12. *INTERVIEWER COMPLETE - BUT DO NOT READ*

SEX *Mark only one answer*

a. *Male*
b. *Female*
z. *No answer*

If respondents could not select a first choice interest in Question 11, tell him to choose any one of his interests and answer the following questions with that interest in mind.

13. Is your main reason for wanting to learn this subject related to present or future employment?

a. Yes - *Go to Question 14*
b. No - *Go to Question 15*
z. *No answer*

14. How does this subject relate to your work? Which one best applies? *Mark only one answer*

a. Meet requirements of employer or profession
b. Learn skills to advance in work
c. Learn skills to get a new job
z. *No answer*

15. Which one of the following is your main reason for wanting to learn this subject? *Mark only one answer*

a. Personal enjoyment
b. Learn skills useful for daily life or saving money
c. Meet people or be with friends
d. Learn for sake of learning, become better informed
e. Help people
f. Enrich family life
g. *Other*
z. *No answer*

16. Do you want a series of courses or program of study, or are you interested in taking only one course in this subject? *Mark only one answer*

a. Series of courses/Program of study
b. Single course
c. *Other*
z. *No answer*

17. Where would you want to learn the subject or skill you are interested in? Choose one of these.

a. Place of your employment - *Go to Question 19*
b. At home - *Go to Question 19*
c. A community building, such as a library, church, or community center - *Go to Ques. 19*
d. An educational building such as a school, college or adult education center - *Go to Question 18*
e. *Makes no difference* - *Go to Question 20*
z. *No answer*

18. What kind of school building would you pick? Choose one.

a. Elementary, junior high or high school building
b. Vocational or business school building (any school that prepares for an occupation - like nursing, mechanics, hairdressing, etc.)
c. BOCES building (area occupational center)
d. Adult education center
e. Two-year college building (Community, Ag & Tech)
f. Four-year college or university building
g. *Other*
z. *No answer*

19. Why is this place your first choice? Let me read the list, then choose one. *Mark only one answer*

a. Location is convenient (easy to get there)
b. Doesn't cost too much money
c. Familiar with the place or people
d. Known for its good courses or teachers
e. They have the best facilities, tools and equipment
f. Free to set your own speed and time of learning
g. *None of these*
z. *No answer*

IF ANSWER TO QUESTION 17 IS "AT HOME", MARK "f" FOR QUESTION 20 AND GO TO QUESTION 21.

20. How would you get there? *Mark only one answer*

a. Car (truck, motorcycle)
b. Bus or train
c. Bicycle
d. Walk
e. *Other*
f. *No applicable (for those whose preference is "at home")*
z. *No answer*

21. Would you prefer to learn about your main interest: *Mark only one answer*

a. Together with a group of people
b. With one person who would teach or help you
c. Completely on your own
z. *No answer*

22. Which one of these methods would you most prefer to learn by? *Mark only one answer*

a. Lecture and demonstrations
b. Learning by doing
c. Questions and discussions
d. Correspondence or home study
e. On-the-job training
f. TV, records, tapes
g. Reading
z. *No answer*

23. Here are some reasons that keep people from taking courses. Are any of these keeping you from taking courses in the subject you are interested in? Answer YES or NO to each.

a. Classes you want aren't scheduled when you can attend
b. Classes given in an area that is dangerous or hard to get to
c. Classes are too far away or you have no way to get there
d. Classes are not given in your subject of interest
e. Cost of tuition
f. Cost of books, materials or equipment
g. Cost of new clothes or uniforms
h. Need for baby-sitter or other child care
i. Cost of travel to classes
j. Amount of time required to complete program
k. Job responsibilities
l. Home/family responsibilites; other activities or responsibilities
m. Feel you are too old
n. Nobody you know goes to classes
o. Afraid you won't do well
p. Not enough information on classes available
q. Class assignments or homework would take too much time
r. Would take time away from earning money
s. No one to help you get started
t. Class filled before you could register
u. Physical disability or poor health
z. *No answer*

24. Which one of these is the most important reason keeping you from taking a course? *If respondent can't select, mark "y".* *Mark only one answer*

The following questions will tell us what scheduling would be most convenient for you, if all the difficulties could be overcome and you could learn the subject you are interested in.

25. How long would you want a course to continue? Choose one. *Mark only one answer*

a. 1 or 2 sessions
b. 1 to 4 months
c. More than 4 months
d. *Don't know*
z. *No answer*

26. During what seasons of the year could you take a course? Answer YES or NO to each. *Mark "YES" answers only.*

a. Summer
b. Fall
c. Winter
d. Spring
e. *Don't know*
z. *No answer*

27. What time of the day is convenient for you for taking a course? Answer YES or NO to each. *Mark only one answer*

a. Mornings
b. Afternoons
c. Evenings
z. *No answer*

28. What days of the week are most convenient? Answer YES or No to each. *Mark only one answer*

a. Monday
b. Tuesday
c. Wednesday
d. Thursday
e. Friday
f. Saturday
g. Sunday
z. *No answer*

29. How often should each class meet? Choose one. *Mark only one answer*

a. Only once or twice
b. Once or twice a month
c. Once a week
d. Two to four times a week
e. Daily
f. *Makes no difference*
z. *No answer*

30. How long should each session last? Choose one. *Mark only one answer*

a. 1 hour
b. 1 1/2 hours
c. 2 to 4 hours
d. All day
e. *Don't know*
z. *No answer*

31. Is it important that you get credit or some other form of recognition, like a certificate of attendance or completion, for taking a course? Choose one. *Mark only one answer*

a. Credit
b. Some form of recognition
c. Neither
z. *No answer*

32. Is it important that you take a college level course?

Mark only one answer

a. Yes
b. No
z. *No answer*

33. Would you be studying to get a license, diploma or degree?

a. Yes - *Go to Question 34*
b. No - *Go to Question 35*
z. *No answer*

34. Which of these do you want? Choose one. *(Instruction: If more than one, check most important).*

Mark only one answer

a. High School Diploma
b. License
c. Other certificate or diploma
d. 2-Year college degree
e. 4-Year college or graduate degree
f. *Other*
z. *No answer*

35. How much would you be willing to pay for taking this course? Let me read the list, then choose one.

Mark only one answer

a. More than $100
b. Between $50 and $100
c. Between $25 and $50
d. Between $10 and $25
e. Between $1 and $10
f. Should be free of charge
z. *No answer*

36. What is the greatest distance you would travel one way to get to a class? Let me read the list, then choose one.

Mark only one answer

a. 41 miles or more
b. 21 to 40 miles
c. 11 to 20 miles
d. 6 to 10 miles
e. 1 to 5 miles
f. Less than 1 mile
g. None
z. *No answer*

37. What is the greatest amount of time you would spend to get to a class (one way)? Choose one.

Mark only one answer

a. 2 hours or more
b. 1 to 2 hours
c. 1/2 to 1 hour
d. 15 minutes to 1/2 hour
e. Less than 15 minutes
f. No time
z. *No answer*

38. Do you feel you have enough information about local continuing education courses in the subjects you are interested in?

Mark only one answer

a. Yes
b. No
c. No opinion
z. *No answer*

39. Which one of these 6 ways would best help you know what is available in adult education? Let me read the list, then choose one.

Mark only one answer

a. Newspapers
b. Bulletins, catalogues or posters
c. Radio or TV
d. Mailed notices or any notices received at home
e. An information center
f. At place of work
g. *None of these*
z. *No answer*

40. Some communities have counselors available to advise about continuing education courses and services and how to get started. How helpful would such a service be to you?

Mark only one answer

a. Very helpful
b. Somewhat helpful
c. Not very helpful
d. Not at all helpful
z. *No answer*

41. How likely would you be to consult an adult education counselor for information and help to find financial assistance for taking courses?

Mark only one answer

a. Very likely
b. Somewhat likely
c. Not likely
d. Would not consult
z. *No answer*

42. How likely would you be to consult an adult education counselor for advice about courses related to your work?

Mark only one answer

a. Very likely
b. Somewhat likely
c. Not likely
d. Would not consult
z. *No answer*

43. Do you have any children living at home?

Mark only one answer

a. Yes - *Go to Question 44*
b. No - *Go to Question 48*
z. *No answer*

44. How many children under 6 years?

Mark only one answer

a. None
b. One or two
c. Three or more
z. *No answer*

45. How many children between 6 and 18 years?

Mark only one answer

a. None
b. One or two
c. Three or four
d. Five or more
z. *No answer*

46. Are you employed at the present time? (Answer YES if you work full-time or part-time or are self-employed full or part-time).

Mark only one answer

a. Yes - *Go to Question 47*
b. No - *Go to Question 48*
z. *No answer*

47. How many hours per week do you work? If you have more than one job, include total number of hours for all employment.

(Interviewer: Don't read list. Mark letter that describes respondent's answer).

Mark only one answer

a. More than 50 hours per week
b. 41 to 50 hours
c. 31 to 40 hours
d. 21 to 30 hours
e. 20 hours or less
z. *No answer*

48. Do any of these apply to you? Answer YES or NO to each. *Mark each "Yes" on answer sheet.*

a. Retired
b. Homemaker or housewife
c. Veteran
d. Looking for work or on layoff
e. Disabled
z. *No answer, none of these. Mark "Z" (if respondent answers "No" to "a" through "e".*

Introduction explaining that: A good survey tries to make sure it gets information from a wide variety of people. Your answers to these questions will help us make sure that we haven't omitted the responses and opinions of any particular group in a community. No names or addresses are being used.

49. Tell us the letter that describes what your annual combined family income is for 1975. Please look at this card. *(Give Handcard #1 to respondent).*

a. Less than $2,000
b. $2,000 to $3,000
c. $3,000 to $7,000
d. $7,000 to $10,000
e. $10,000 to $15,000
f. $15,000 to $20,000
g. $20,000 to $25,000
h. $25,000 to $30,000
i. $30,000 to $35,000
j. $35,000 or over
z. *No answer*

50. Tell us the letter that describes your age.

a. Under 25
b. Between 25 and 34
c. Between 35 and 44
d. Between 45 and 54
e. 55 or more
z. *No answer*

51. Tell us the letter of the group with which you identify yourself.

a. Hispanic-Latin American, Puerto Rican
b. Black
c. White
d. Oriental (Asian or Pacific Islander)
e. Native American-American Indian
f. Other
z. *No answer*

Thank you. I sincerely appreciate your cooperation, and I know your answers will be of much help as we get a better picture of what people in the area want. It's been good talking with you.

Part III

Floyd C. Pennington

Information for Decision-Making: Guidelines for Implementing Needs Assessments

Floyd C. Pennington

Information for Decision-Making: Guidelines for Implementing Needs Assessments

Information for Decision-Making

Perhaps the common thread tying together needs assessment theory and practice is that needs assessment studies are conducted to provide data for making informed program decisions. Effective needs assessment studies are rational responses to identified problems, designed so that results will suggest alternative solutions to the problems and so that the requisite action decisions can be made. Adult educators do not have the resources or patience to engage in needs assessment studies that do not provide adequate data to use in essential decision-making related to their programming efforts. As a practical matter, persons conducting needs assessments need to understand the problem being assessed, be clear about their task, plan for the execution of the study, and know how the results will be useful, *before* a study is initiated.

The studies included in this volume indicate that the assessors knew what they wanted to accomplish before they initiated a full-scale study. The processes described were not intended to identify problems but to ascertain the extent and dimensions of problems that were already identified and understood by the decision-makers. A situation was identified that had priority in the minds of persons who could make decisions based on the outcomes of the study. The studies started from an informed base and proceeded in logical and sequential steps through planning, implementation, reporting, and use of the data obtained from the investigation.

An organization conducting a needs assessment study will call attention to itself, especially among the persons providing the information. People expect programming results following an assessment study. To gather data and not follow through will create a negative image for the agency conducting the study. The necessity for action following assessment requires that the agency has, or can acquire, the resources to deliver the programs that seem indicated in the study. If an agency is not going to use the needs assessment data or cannot deliver what seems to be indicated by the study, it is better not to ask the question. Studies which are purely exploratory should be clearly identified as such so that consumer expectations are not piqued and then neglected.

Some Preliminary Questions

Some adult educators might do well to spend as much as thirty percent of the total time required to conduct a needs assessment in planning for the execution of the study. During the planning phase answers might be sought to the following questions:

1. Who is the audience that will be using the needs assessment data as an input into their decision-making?
2. What questions do these persons need answered so that informed judgments and clear action plans can be made?
3. What data will the decision-maker trust?
4. Do the data exist? How accessible are the data?
5. What techniques should be employed to acquire the essential data?
6. How do the decision-makers want the data presented?

Who needs what? What will they trust? How can I get it? When I get it, how should I present it?

Characteristics of Needs Assessments

The needs assessments presented in this volume and other needs assessments have several major characteristics. In the first place most needs assessments employ a *systematic method of collecting data* from persons who can affect or are affected by the problem being examined (Witken, 1975).

A second characteristic is that needs assessments are *continuous* (Atwood and Ellis, 1973; Watson, 1973; Kaufman, 1972). Needs of constituent groups are not fixed in time. The needs of adults change as their environments change and continuous assessments can monitor these

Floyd C. Pennington is Director of the Office of Continuing Medical Education at the Medical School, University of Michigan.

changes. Needs assessments should receive continuous attention to assure that data used to make programming decisions are relevant to the problem and the client.

Needs assessments *vary in scope and cost* (Knox, 1973). Data can be collected systematically by making a few phone calls to key persons in a constituent group. Studies can involve a variety of data collection techniques and include a large group of persons in the study—like those reported in the preceding chapters. Studies can be supported as a part of an adult educator's job responsibility or can be major projects funded by an external agency. Assessment studies can be done within organizations, communities, states or on a national scale.

Data collected in needs assessments will probably include *subjective and objective* data. The decision-maker will be interested in opinions as well as quantitative indices indicating the extent of a particular dimension of the problem being examined. Persons using results of a needs assessment study will value certain types of data and weigh these data more in their decisioning process. For some, the objective data will weigh more heavily than the subjective data. For others, the opinions and conjectures of the client group will be more relevant for decisioning. In most cases, a combination of data sources will be used.

A pervasive characteristic of most needs assessments resulting in effective actions is the *involvement* of potential clients, community groups, and educators as *partners* in decision-making. Needs assessment studies involving persons carefully selected for their role perspective on the problem being assessed can build support for the study, for the decisions made during the study, and for the programs that result from the assessment. Multiple role perspectives enrich the deliberations about the problem and the development of alternative solutions. Decision-makers feel more comfortable in selecting courses of action if those who are required to carry out the action are brought into the assessment activity from its inception.

Finally, needs assessments are a *transitional process* from the present to the future. Needs assessment studies are systematic attempts at observing a current set of circumstances and projecting a more desired set of circumstances. Results from needs assessment studies serve to provide both baseline data to use in making summative evaluation judgments regarding program impact, and planning data for projecting alternative mechanisms to reduce the gap between current and desired circumstances.

Benefits of Needs Assessments

What should adult educators expect in return for the investment made in a carefully conceived, systematic needs assessment? Some potential benefits include:

1. data to use in implementing positive changes in educational programs;
2. a clearer understanding of changing patterns of educational needs;
3. data for making decisions about programming priorities;
4. an information base for deciding about resource allocation;
5. an expanding empirical base for future decisions regarding educational programs or policies;
6. data regarding learner preferences for content areas and instructional styles;
7. data to focus programs so that purposes and consequences are an integral part of the design process;
8. increased public involvement and commitment to educational planning and participation; and
9. responses to federal and state mandates requiring appropriate use of public monies.

Guidelines for Implementing Needs Assessments

Needs assessment procedures are determined by the type of questions that need to be asked about the problem, the data collection technique selected, and the requirements of the person(s) to whom the data will be reported. There are some general suggestions, however, that might be useful in planning for and implementing a needs assessment.

1. Make sure someone is responsible for the study and that there is support from the organization's administrative structure. Someone must see to it that the study's details are taken care of and the organization must be committed to conducting the study and using the results.
2. Make sure that key people in the agency know about the study and how outcomes might benefit their efforts.
3. Ask questions about the problem in a variety of ways. Use different methods and techniques to gather information. Obtain data from a variety of people with independent perspectives on the problem.
4. Be very clear about what information you are asking people to give you. Give clear directions, and make sure the respondents understand the questions.
5. Be sensitive to the pressures and constraints on people responding to the assessment. Be prepared to revisit persons who cannot take adequate time to participate.
6. Do not raise expectations by requesting information that you cannot use or encourage others to use.
7. Be aware that people are expecting something to occur after an assessment and that they will be looking for things they thought were important.
8. Use existing data sources where possible. If someone has gathered all or part of the information you need, then use what you can from their efforts. Previous studies, public documents, literature, etc. should be examined first. This will help keep your study manageable.

9. Establish ground rules early. Who will have access to the data? When can they have access? What can they use the data for prior to the completion of the study?

10. Have a rationale for all the data you collect. Needs assessment studies are intended to support specific decisions. Do not take the attitude that "while I'm doing this I might as well get all I can from these people."

11. Be ready to respond to unintended outcomes. The study design should not serve as blinders. Excellent input may be acquired from unexpected quarters. Be flexible enough to pursue leads where appropriate.

12. Delineate options and provide supportive data for decision-makers but let the decision-maker do the deciding.

13. Provide feedback to appropriate persons throughout the study. In some instances, preliminary data may be required before you intended to make it available. Be sure that the data released is as carefully considered as possible and that contingencies are clearly specified if early reporting is needed.

14. Be professional in the conduct of your study. Let people know that you know what you are doing and assure them that action will follow the study.

15. Be tolerant of ambiguity when the responses you get are not really answers to the questions you asked. You may not get answers to all of your questions or have an opportunity to ask all of the questions.

16. Share your plan for the study with others to see if it makes sense. Test your questions with smaller numbers of respondents before a broad scale study. Be prepared with queries and ways to analyze results before the study is underway.

17. Express appreciation to those participating in the study. In many instances, these are potential clients. Don't chase away the customer.

18. Don't always expect the program that is designed following a needs assessment study to be the one that you think you could have proposed before the effort.

19. Get all the mileage you can from the data. Analyze them, re-analyze them, and then look at them again. The more ways you examine the data, the more potential surprises can be found.

20. Deliver the results.

Following these hints will not necessarily guarantee successful needs assessment studies. The hints do, however, show that a lot of common sense and common courtesy is an ally to a needs assessment study and decisions based on the study outcomes.

Most adult educators cannot conduct a comprehensive needs assessment for every educational activity and service planned by their organization. The realities of staff, time, and money are restrictive. Not every suggestion in the chapters of this volume can be followed each time an assessment is done. Some assessment, however, can be done for every program and service an agency is considering. From small informed queries to expansive studies, reasonable data for decisions can be acquired and should play an important role in educational planning for adult programs.

Practical Steps in Conducting a Needs Assessment

The approaches and techniques discussed in these papers, the collective wisdom of other practitioners, and the growing body of substantive literature can be summarized in several general steps (Moore, 1979).

1. **Deciding to Plan.**
   This includes the recognition of the problem and the conscious decision to examine the problem in more detail to ascertain if an educational intervention or another intervention will help solve the problem.

2. **Establishing a Coordinating Structure for the Needs Assessment.**
   This includes appointing some person or persons to be responsible for the needs assessment study in terms of its administration, planning, implementation, analysis, and reporting. At this time, it may be appropriate to plan for the various role perspectives that will be represented on the needs assessment team or the various support groups that will be needed throughout the project to assure that action will follow the assessment.

3. **Specifying the Purpose of the Needs Assessment.**
   This consists of formulating a rationale for the project. At this particular point in the planning for the assessment, the answer to the question "Why do a needs assessment?" should be clearly delineated. This rationale will familiarize members of the assessment team or the various committees working on a needs assessment with the ultimate goal of the needs assessment and lay the foundation for action plans.

4. **Defining the Scope of the Needs Assessment.**
   This involves a specification of the level of the study: Whose needs will be assessed? Who will use the information? The management of the entire process including time, tasks, and resources will be affected by costs and the acquisition of other resources to complete the project, including the scheduling of various phases of the study.

5. **Assessing Obstacles and Restraints.**
   This consists of an examination of the facilitating and impeding variables that might be faced during the project. This may include political or economic factors or those factors related to difficulty in access to data.

6. **Informing the Audience who will Receive the Assessment Instruments.**
   This is the public relations aspect of needs assessment. It is important to create an awareness of the

intended uses of the needs assessment information and the kind of decisions that will be made with the data. It is also important to indicate how much input various individuals and groups will have in the process. The more people know what is happening, why it is happening, and how the data wil be used, the greater is the likelihood of their cooperation.

7. **Identifying the Symptoms of Broad Need Areas.**
In this step, the major areas of the problem that are understood at the present time can be delineated and priority among those areas can be established for more specific assessment.

8. **Identifying and Selecting the Appropriate Assessment Techniques.**
This consists of determining specific strategies to use in the needs assessment study. It answers the questions "What specifically are you going to do?"; "In what sequence?"; and "When?"

9. **Setting Standards of Criteria for Measuring Need.**
This includes identifying or determining the criterion related to the need that is being assessed. The need may be specified in terms of knowledge, skills, or sensitivity, and may be compared against existing standards already established by other persons or groups.

10. **Gathering the Needs Data.**
This requires implementing and monitoring the strategies of the needs assessment plan. It requires that someone be clearly in charge of the study. It involves determining the existing condition or levels of needs by acquiring appropriate and relevant data.

11. **Collating the Needs Data.**
This involves compiling and summarizing the information gathered in the needs assessment process in a format that can be used by decision-makers.

12. **Interpreting the Data and Identifying the Needs.**
This phase involves comparing the current circumstances with a desired or required circumstance. The analysis, interpretation, and evaluation of the information gathered in this study are essential components of any decision-making process that needs to follow the assessment study.

13. **Prioritizing Identified Needs.**
This is a decisioning process that includes weighing the data, comparing it with resources, and selecting the most critical need areas which can be met by short and long-range programs and services.

14. **Evaluating the Study.**
This step is not necessarily to be taken toward the end of the needs study. Questions must be answered throughout the study about how the information is being gathered, how the information will probably be used for deciding on programs and services and whether or not what was expected to be achieved is being achieved through the data collection process. At this point, the information collected and the decisions being made should be compared to the original objectives of the assessment study. Any unintended outcomes can be examined for their value and subsequent decisions made on the basis of their relationship to the program's specific objectives.

15. **Documenting and Reporting to Decision-Makers.**
This step involves a formal dissemination of findings from the needs assessment study to individuals concerned with making decisions. The information should be presented in a form that will be useful and usable to them. It is very important to understand what decisions the decision-makers will be making, what data they will trust, and what format they need the data in to make informed decisions.

16. **Implementing the Findings.**
This is the action step to implementing results of the study. New course offerings, course alternatives, new programs, adjustments in services, and other activities are the culmination of the needs assessment cycle. In many instances, the beginning and the end of a needs assessment grow from the actions of the agency and its desire to improve its programs and services as well as its own organizational proficiency.

Not all adult educators will be able to follow each of these steps. However, several of the steps may be key to the different kinds of studies that are being conducted. Other steps with more specificity can be selected. The intention of providing these suggested steps is to give to the practitioner an idea of what might be included in a very comprehensive needs assessment study. More informal studies may involve only a few of the steps in each of the major phases of the study, but still yield reliable data.

Table I depicts a needs assessment planning grid that persons in adult education may use in preliminary planning of their needs assessment. Filling in the grid may help establish an approach to a study and serve to keep track of progress.

Conclusion

The papers included in this volume provide excellent examples of major needs assessment studies that have been conducted in a variety of settings. Suggestions included in this chapter combined with the insights that have been drawn from the experience of the previous authors should provide the reader with an excellent perspective on conducting needs assessment. The task is one that is critical to effective program development and has long term implications for maintaining vitality and integrity of any adult education agency.

Needs Assessment Planner

Purpose	Audience	
Issues	How Identified	
	Resources Required	Resources Aviable
What Data Will Be Collected		
What Sources Will Be Used		
What Techniques Will Be Used		
What Relationships Are Important		
When Will It Be Conducted		
How Will Data Be Analyzed		
How Will Findings Be Documented And Reported		

References

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Kaufman, R.A. *Educational System Planning*. Prentice Hall, Inc., Englewood Cliffs, New Jersey: 1972.

Knox, A.B. "Helping Adults to Learn." University of Illinois, Office for the Study of Continuing Education in the Professions. Unpublished manuscript, 1973.

Moore, D. et al. "Needs Assessment for Hospital Based Continuing Education." V.A. Medical Center, Ann Arbor, Michigan. Unpublished manuscript, 1979.

Watson, C.D. *Educational Needs Assessment*, 1972. Arkansas Department of Education. ERIC Document #ED084 293. 1973.

Witken, B.R. *An Analysis of Needs Assessment Techniques for Educational Planning at State, Intermediate and District Levels*. Alameda County Superintendent of Schools, Hayward, California. National Institute of Education, Department of Health, Education and Welfare, Washington, D.C., 1975.

Part IV

David R. Greer

Annotated Bibliography on Needs Assessment

David R. Greer

Annotated Bibliography on Needs Assessment

This bibliography is divided into three parts. Listed first are several general reference works devoted to the broad subject of survey research methods. The second listing includes books and articles devoted more specifically to particular techniques, not necessarily involving survey methodology, which apply to adult educational needs assessments in particular. Finally, we present a whole host of reports of actual needs assessment projects that have been conducted around the nation in the last several years. Many of these are contained on ERIC microfisches and are abstracted in RIE (Research in Education). For these, the ED (Education Document) number and "EDRS" are used in place of the usual publication information. To secure a copy, order the microfiche (MF) or hard copy (HC) from ERIC Document Reproduction Service, P. O. Box 190, Arlington, VA 22210. (The cost of MF and HC is included in each citation.)

Several of the remaining reports were abstracted from the entries in the Regents' National Competition on Assessing the Needs of Adult Learners, conducted in early 1979. More information on these unpublished studies can be secured directly from the authors, whose addresses are included as part of the bibliographic citation.

Books About Survey Research

Babbie, Earl R. *Survey Research Methods*. Belmont, Cal.: Wadsworth Publishing Co., Inc., 1973. 3d ed.

This book thoroughly discusses the details of survey research design: sampling theory and methods, instrument (questionnaire) design, techniques of interviewing, conduct of pre-tests and pilot projects, and tips on data collection. One entire section is devoted to data analysis, including multivariate, univariate, regression, path, and factor analysis, plus the use and interpretation of scales and indices. Author also discusses the role, limitations, implications, and ethical considerations of this type of research.

Backstrom, Charles H., and Hursh, Gerald D. *Survey Research*. Evanston, Illinois: Northwestern University Press, 1963.

Although intended primarily for political science polltakers, this is an excellent "how-to" manual with detailed instructions, sample worksheets, and checklists for sample selection, interviewing, survey management, questionnaire writing and revision, and data processing. The authors advise at the outset against the limitations of research, and the need for total objectivity and avoidance of over-surveying.

Bowers and Associates. *A Guide to Needs Assessment in Community Education*. Reston, Va.: Bowers and Associates, 197-.

On pp. 8-23, this report offers sequenced formulas for conducting surveys, and analyzes advantages/disadvantages of alternative methods.

Margulies, Newton, and Wallace, John. *Organizational Change: Techniques And Applications*. Glenview, Illinois: Scott, Foresman, and Company, 1973.

Chapter 3 (pp. 22-43) describes and compares the data collection methods used in action research, namely: survey questionnaire, interview, organizational "sensing", longitudinal study, structured observation, self-generated scales, and the "organizational mirror."

David R. Greer is a doctoral candidate in Higher Education at The Ohio State University.

Miller, Delbert C. *Handbook of Research Design and Social Measurement*. New York: David McKay Company, 1977.

This is a complete reference work dealing with survey design, data collection techniques, statistical analysis, and research administration. Statistical formulas and tables are provided, along with standardized scales and indices. A particularly helpful discussion of the pro's and con's of mail-back questionnaires is provided.

University of Michigan. *Interviewer's Manual*. Ann Arbor: Survey Research Center, Institute for Social Research, 1976.

Although designed primarily for employees of the University's Survey Research Center, this book provides helpful directions on how to record, edit, and code data secured through interviews, as well as how to secure and update maps and mailing lists, select and arrange appointments with respondents, use probing questions, and scout geographic locations.

Warren, Roland L. *Studying Your Community*. New York: Russell Sage Foundation, 1965.

Dealing with all kinds of civic surveys, not just education-related ones, this guidebook gives organizational procedures, advice on whether to use citizen volunteers or professionals, whether to study a sample or the entire population, and presents some of the human relations implications of projects like this. An appendix lists available census reports and maps, with suggestions on their effective use.

Works on Methods of Assessing Adult Learning Needs

Benson, Dennis K., and Marks, Sandra L. *A Needs Assessment Survival Kit*. Columbus, Ohio: Appropriate Solutions, Inc., 1978.

A semi-facetious pamphlet full of caveats about the foibles and hidden political dilemmas involved in conducting needs surveys among social service and education agencies. A partial cure for naivete.

Cross, K. Patricia. *A Critical Review of State and National Studies of The Needs and Interests of Adult Learners*. Arlington, Va.: ERIC Document Reproduction Service, ED 155 372, 1977.

Thirty studies from various parts of the country are cited, compared, and analyzed as to variables measured, methods used, sizes and nature of populations.

Cross, K. Patricia. *The Missing Link: Connecting Adult Learners to Learning Resources*. New York: College Entrance Examination Board, 1978.

This work briefly discusses the findings of recent needs studies, but goes on to explore the strategies and responses needed—mainly educational brokering through educational information centers—that are needed in order to make the studies meaningful and effective.

Cross, K. Patricia. *The Needs of Non-Traditional Learners and the Responses of Non-Traditional Programs*. Arlington, Va: ERIC Document Reproduction Service, ED 150 900, 1977.

The author presents a relatively abstract taxonomy of the various types of needs recognized by prospective learners, then defines each in detail, and describes the characteristics of a national sample of lifelong learners in terms of these needs. An appendix of this report summarizes many related studies, most of which are also discussed in her work cited immediately above.

Davis, Larry Nolan. *Planning, Conducting, and Evaluating Workshops*. Austin, Tex.: Learning Concepts, 1974.

Written in a style well adapted to corporate training and development settings, this handy manual in chapter one presents two primary needs assessment techniques—the problem analysis worksheet and the Competency Model. The author also discusses the relative effectiveness of authoritarian, laissez faire, and democratic approaches to describing vs. prescribing the needs, especially of "captive" populations.

Dowling, William D. "How to Identify Needs of Groups for Continuing Education." *American Journal of Pharmaceutical Education*. Volume 33 (December, 1969), pp. 721-729.

Several techniques besides surveys are identified, explained, and analyzed, including literature searches, work with standing, ad hoc, or advisory committees, observations of trends, examination of preprofessional training, and evaluation/imitation of current, successful programs.

Knox, Alan B. *Critical Appraisal of the Needs of Adults for Educational Experiences as a Basis for Program Development*. Arlington, Va.: ERIC Document Reproduction Service, ED 022 090, 1969.

A conceptual, rather than empirical, methodology is proposed, consisting of six stages: delimit the domain, describe the potential participant, describe what a successful person in his category would be like, select the most pertinent needs (deficiencies), relate these needs to program design, and predict emergent or widespread needs.

Research Reports on Needs Assessment Projects

Adelson, Richard. *A Competency Model to Assess the Continuing Education Needs of Non-Dermatologists in the Treatment of Dermatologic Problems.* (Author; c/o Veterans' Administration, Middleville Rd., Northport, NY, 11768) 1979, 40 pp.

Survey conducted among 51 physicians in Northeastern U.S. hospitals, using a competency model, where education needs equal the gap between desired level of skills and perceived present level of skill. Workshops were held based on apparent needs, and new performance was measured by a post-test.

Baillie, David, *Non-Traditional Needs Assessment Project.* (Author, c/o Older Wiser Learners, Box 596, Amherst, MA 01002) 1976, 120 pp.

Questionnaires were returned by 600 U. of Mass. students over 25 years of age, stating their educational needs plus perceptions of such barriers as finances, child care problems, counseling, and housing.

Barlow, Bruce M., and Timiraos, Carmen R. *Colorado Needs Assessment: Final Technical Report.* EDRS, 1975, ED 120 243 235 244 128 401. (MF $1.66/HC 18.79)

A Colorado R & D Center surveyed 1500 large employers (as to educational requirements and training provided), 978 community service agencies (as to educational services rendered, referral and follow-up procedures), 5337 individuals (as to occupationally related needs).

Barton, John C. "Continuing Medical Education Needs as Perceived by Selected Ohio Physicians." Ph.D Thesis, The Ohio State University, 1971.

One of several dissertations on the topic of needs assessments advised by Dr. William Dowling (cf. Burkey, Hackel, O'Neal, and Smith, below), this survey measured personal and professional educational needs as related to specialty and practice environment. Seminars, journals, and local medical society meetings were found to be preferred methods, and the variety of subject interests depended on the respondent's specialty.

Bax, Pamela, et al. *A survey of Adult Continuing Education Needs in Virginia.* (Author, P. O. Box 3697, Charlottesville, VA 22903), 1979, 56 pp.

Over 80 volunteer citizen interviewers contacted 1420 residents of Halifax (south central) County, Virginia. Data reported demographic variables plus preferred content, time, format, place for continuing education events, and perceived barriers.

Beder, Harold W. *Education for Community Participation in Health Decision-Making.* EDRS, 1979, ED 105 225. (MF only, $.76)

Non-survey method, using instead a steering committee of practitioners representing many types of clients. Committee advised on subject areas, effectiveness of programs, and attractiveness/convenience of alternative program formats.

Block, Samuel A. *Adult Education for the Deaf of Illinois.* EDRS, 1973, ED 092 764. (MF $.75/HC 6.60)

Questionnaires were mailed to 1200 deaf persons (7% of state's deaf population) to determine their interest in resuming education. 28% response. Follow-up interviews with 200 respondents revealed greatest interest in ABE and vocational training, preferably at community colleges.

Bramble, William J., and Mertens, Donna M. *Results of Appalachian Education Satellite Project Needs Assessment Conference: Technical Report #14.* EDRS, 1976, ED 127 934. (MF $.83/HC 6.01)

Series of 12 conferences was held throughout southeastern mountain areas of U.S. involving professional workers from government, education, business, industry, health, and human service organizations. 381 participants rated proposed need areas on 1-7 scale, indicated preferences as to time format, place, offering agency, etc.

Brechler, Frederick C. *Assessing Needs of the Adult: The Barry College Crime Prevention Program.* (Author, c/o Barry College, 11300 NE Second Avenue, Miami FL 33161), 1979, 21 pp.

This project used 8 community "organizers" to determine the needs of their fellow senior citizens as to crime prevention training. These organizers then aided the director in setting up 45 community forums that reached 2500 residents of the Miami area.

Bryant, Antusa S. *ABE Staff Development Needs Assessment in Minnesota.* EDRS, 1973, ED 097 458. (MF $.75/HC 3.15)

The project covered 4 populations as follows: 335 school superintendents; 18 ABE administrators; 70 school administrative, non-ABE area staff; 57 higher education administrators in ABE-related fields.

Burkey, Frederick T. "Educational Interests of Older Adult Members of the Brethern Church in Ohio." Ph.D. Thesis, The Ohio State University, 1975.

A centrally devised questionnaire was administered by 20 pastors to 243 parishioners aged 55 or older, asking their interest in 40 subject areas. Chief interest lay in the instrumental area of topics (how to manage money, cope with stress, maintain a home, etc.) with general level of interest related to health and previous educational level. Comparisons with pastors' ratings showed they tended to overestimate interests.

Carp, Abraham, Peterson, R.C., and Roelfs, Pamela. *Learning Interests and Experiences of Adult Americans.* EDRS, 1973, ED 097 421. (MF $.75/ HC 5.40)

One of three surveys conducted by the Commission on Non-Traditional Study in 1972 to describe in detail the potential market for, and analyze the activity of those already engaged in, adult learning. A total of 1639 households, including all members ages 16-60, participated nationwide. Comprehensive results are tabulated by characteristics, reasons, methods, barriers, content, degree aspirations, needs for guidance, desire for credit, time and cost factors, and preferred activities. The questionnaire (shown in appendix) has been adapted and used by others since this study.

Cassara, Beverly B. *Developing Curricula with the Culturally Unique.* (c/o author, 724 9th Street, N.W., Suite 200, Washington, D.C., 20001), 1975. 16 pp.

Graduate students in adult education launched this project by hosting discussion groups in low-cost urban housing areas. Expressed needs and interests were transformed into learning sessions with high level of participant involvement, ranging from G.E.D. classes to counseling seminars to cooking courses.

Dicken, Kenneth C. *Development of Transportation/Distribution Management Program.* (c/o author, University of Cincinnati, 102 McMicken, Cincinnati, OH 45221), 1979. 46 pp.

Using an advisory committee of 10 transportation executives, the Evening College of the Univ. of Cincinnati accomplished a revision of this curriculum so as to better meet industry needs and be more available to evening, part-time students.

Dillon, Jacqueline. *Learning Aspirations of Older Adults.* (c/o author, 11333 Big Bend Blvd., St. Louis, MO 63122), 1978. 58 pp.

Two separate means—mail survey to 320 residents and informal sessions with 1100 club members—were used to assess nature and extent of older apartment dwellers' interests in learning new subjects or skills. A very strong correlation was shown between educational background or respondent's health and interests in further education.

Douglas, Jeanne Masson. *Assessing the Educational Needs and Interests of Older Adult Learners.* (c/o author, 19 Park Street, Easthampton, MA 01027), 1978. 32 pp.

Needs of older citizens were surveyed by questionnaire in two different settings—mailed to their homes, or distributed through weekly bingo groups. The responses of 87 respondents were classified according to McClusky's needs categories, with the greatest interest falling in the expressive and coping areas.

Ferguson, L.G., and others. *The Assessment of Adult Needs; Phase I of Multi-County Assessment of Adult Needs Project.* ED 112 989. (MF $.76/HC 10.78)

The 4-county area around Waco, Texas, was surveyed by means of interviews with a sample of 750 citizens from census rolls. Study dealt with program interests, attitudes, effectiveness of advertising, perceived barriers, cost and availability perceptions, ability to meet entrance requirements. Study included 2-day training session for interviewers. Findings are highlighted, and means of disseminating results are shown.

Galant, Richard L. *Community Network Project.* (c/o author, 4900 East Huron River Drive, Ann Arbor, MI 48106), 1979. 101 pp.

This project has united Washtenaw Community College and the ten local school districts of Washtenaw County (Michigan) in conducting an inventory of educational offerings and an assessment of needs (in progress) of area adults, especially the unemployed (through CETA). Results not yet available.

Galvin, Kevin and others. *Educational and Retraining Needs of Older Adults: Final Project Report.* EDRS, 1975, ED 110 132. (MF $.76/HC 1.95)

Seven southern California colleges collaborated in survey as to interest areas, preferred location, special services needed, occupational training needs, etc.

Groff, Warren H. *Professional Renewal Through a Comprehensive Diagnostic (Needs Assessment) and Development System.* (c/o author, Box 698, Mansfield, OH 44901), 1979. 39 pp.

Staff development of faculty, department chairpersons, and administrators of an Ohio technical college has been assisted by using a battery of self-assessments, student evaluations, and peer conferences.

Hackel, Alan S. "Police Education in Franklin County: A Study of Need." Ph.D. dissertation, the Ohio State University, 1970.

Mail survey among sample of 156 police officers in central Ohio. Survey presented demographic questions plus two sections rating perceived importance of (1) police duties, and (2) related university coursework. Need was assessed indirectly, and correlated to officers' rank, age, tenure, education level, and duty assignment.

Hendershot, Eleanor M. *Nontraditional Student Experience at a Large University*. (c/o author, Room 1220 SAB, University of Michigan, Ann Arbor, MI 48109), 1976. 41 pp.

A sample of 54 students age 25 or older at the University of Michigan was questioned as to specificity of goals, problems of attending college, degree of self-direction, and financial barriers.

Hoffman, Donald H. *Arts Programming for the Elderly*. (c/o author, Council on Aging, University of Kentucky, Lexington, KY 40506, or in *Educational Gerontology*, 3:17-33, 1978).17 pp.

A sample of 1,000 elderly South Carolina residents responded to a mail survey about their past experience, present involvement, and future interests in arts programs and activities. Workshops, activities, and courses were developed and conducted based on results, and were quite successful.

Hutchins, Elbert C. *Learning Needs in Bourbon, Linn, and Crawford Counties, Kansas*. EDRS, 1975, ED 108 732. (MF $.76/HC 3.32)

This is one of three studies (see also Hutchins and St. Louis below) using a modified form of the ETS "Survey of Adult Learning." Surveyed 344 of the 61,000 citizens in service area of Ft. Scott (Kansas) Community College. The questionnaire measures conditions and reasons for continued learning, obstacles, sources of information and advice, preferred subject areas, and attitudes toward the local community college.

Hutchins, Elbert C. *The Learning Needs of Adults in Hill County, Texas*. EDRS, 1977, ED 145 882. (MF $.83/HC 3.50)

Refinement of methodology described above. Sociology students conducted interviews using modified ETS Survey, securing data from random sample of 750 citizens selected from census data. Characteristics of non-respondents were determined from census data as not signficantly different.

Jepson, Peter. *Assessment of Training Needs of Adults in Mohave County: Final Report*. EDRS, 1974, ED 110 799. (MF $.76/HC 1.95)

Study confined to elusive population (in service area of Mohave Community College, Kingman, Arizona) of those under-employed due to weakness in the 3 R's. Only 164 of possible 1100 target population were contacted. Methodology and survey not described. Results were discouraging to sponsor.

Jones, Alice W., and Diener, Thomas J. *Support Staff at the University of Alabama: A Study of Employee Characteristics and Educational Needs: Research Paper #2*. EDRS, 1975, ED 126 353. (MF $.08/HC 2.06)

Surveyed 533 employees as to educational interests, preferred times, and such barriers as child care, costs, scheduling, and travel. Survey is included in report.

Kanun, Clara. *Projecting Needs from Participant Studies*. (c/o author, 331 Nolte Center, 315 Pillsbury Drive., Minneapolis MN 55455), 1979. 43 pp.

Data from samples of about 2,000 students from each of several years' enrollments at the University of Minnesota's Extension Divison were analyzed as to strength and persistence of interest, reasons for taking courses, degree goals, and demographic characteristics.

Leckie, Shirley. *The Catalyst for Change: Students Evaluate an Adult Degree Program*. (c/o author, 2801 Bancroft Street, Toledo, CH 43606), 1979.

Students in an adult liberal studies program at the University of Toledo surveyed 121 fellow current or inactive students. Questionnaire assessed progress in program, reasons for enrolling, reasons for withdrawal or transfer, educational level, and employment status. Results are being used to reform courses, improve faculty skills, and improve program's legitimacy.

Long, Edward J. *Analysis of Professional Development Needs of Part-Time Continuing Education Instructors*. (c/o author, P. O. Box 13489, St. Petersburg, FL 33733), 1979(or, EDRS, 1979, ED 162 678).

A large portion (103) of the part-time continuing education faculty at St. Petersburg Junior College was surveyed to determine level of educational preparation, satisfactions derived from job, their perceptions of the college climate, and incentives for further staff development. Specific subject areas for staff workshops were identified.

Lyman-Viera, Karen A., and Boggs, John. *Social Attitudes and Educational Needs of Women in the Chaffey Community College District.* EDRS, 1976, ED 139 445. (MF $.83/HC 3.50)

Study of 368 women selected at random from stratified population of San Bernadino County. The interview form was adapted for three groups: high school students, post-secondary students, and non-students. Subjects under study included demographic characteristics, perceived barriers to continued learning, educational interests and needs, and suggested changes in educational programs currently available.

Mangano, Thomas, and Corrado, Thomas J. *The Perceived Needs of Re-Entry Adult Students in New York State Two-Year Colleges.* (c/o authors, 229 Milne Hall, SUNY-Albany, Albany, NY 12222), 1978.

Responses were secured from 1166 students at 6 two-year colleges in New York, and compared among traditional students, re-entry adult students, and re-entry students who had again left. Data referred to academic survival skills, personal development, curricular and personal support services. Results were used to inventory institutional resources.

Mann, Opal Hurley, "Differences Between . . . Homemakers and their . . . Desire for . . . Education." Ph.D. dissertation, the Ohio State University, 1971.

Interviews were conducted with 2,500 women in Kentucky during 1966. The questionnaire dealt with employment, spouse's interests, participation in cooperative extension activities, subject interests, sources of information about educational opportunities, and demographic data. Very rigorous study, with extensive statistical treatments.

Maryland Community Service/ Continuing Education. *Final Project Report.* EDRS, 1976, ED 126 286. (MF $.83/HC 6.01)

This Title I project assessed the needs of continuing educators from a variety of settings by means of a survey among 225 persons. Results were validated by attendance at and evaluations of a series of in-service workshops that were conducted based on survey results. (Incidentally, "needs-assessment techniques" was mentioned by the respondents as the area in which they most wanted further training.)

Mohsenin, I. Cassim. *Needs of Adult Students in Undergraduate Resident Education.* (c/o author, 120 Meadow Lane, State College, PA 16801), 1979.

Two samples of 267 students each at Penn State University were compared regarding satisfaction with admission procedures, teaching, curriculum, and advising. One sample were traditional full-time students; the other were adult (i.e., over age 25) full-time students.

Morton, J.B., and Hatfield, Gary. *Adult Needs Assessment in Oklahoma.* Arlington, VA.: EDRS, 1977, ED 156 852. (MF only, $.83)

Phone survey of 855 adults, with questions about interests, employment, years of education, why they wanted to continue learning, preferred days for courses, and demographic data.

Nolfi, George I. *Strengthening the Alternative Post-Secondary System: Continuing and Part-Time Study in Massachusetts.* EDRS, 1973, ED 095 732. (MF $1.80/HC 51.00)

This work deals mostly with a phone survey conducted in Massachusetts regarding a proposed open university, but author also discusses similar surveys in California, Colorado, and by ETS. He also discusses how the results were converted into action in Massachusetts.

Nurnberger, Robert G. *A Profile of Needs: A Study of Post-Secondary Education Needs in Northeastern New York State.* EDRS, 1975, ED 110 620. (MF $1.59/HC 8.29)

Study was conducted simultaneously among a random sample of citizens, continuing education students, and 200 major employers in 16 northeastern New York counties. Users of continuing education were compared with non-users in terms of leisure-time preferences, financial support, preferred time and formats of classes, and demographic descriptors.

O'Neal, Carlton, "In-Service Education Needs of Employees of the Georgia State Department of Agriculture." Ph.D. dissertation, The Ohio State University, 1977.

Mail survey to 80 employees dealt with employment history, level of job and previous education, demographic data, and ratings of importance of possible on-the-job tasks from which training needs were inferred.

Pfister, James W. *Employing Adult-Student Expectations of Continuing Education Teachers to Improve Instruction.* (c/o author, P. O. Box 13489, St. Petersburg FL 33733), 1978.

Comments from a sample of 108 continuing education students at St. Petersburg Junior College as to faculty behaviors, content mastery, communication skills, work levels, and apparent attitudes were used as a basis for staff development activities.

Poppenhagen, Brent W., and Jordan, Thomas S., *Training and Development Specialists: Competencies for Performance and Markets for Employment in Northeastern Ohio.* (c/o authors, 1983 E. 24th Street, Cleveland, OH 44115), 1979.

Eighty (80) industrial training and development directors in northeastern Ohio were asked their personal educational and work background, type of training activities involved in their firms, and those competencies they rated most crucial in their positions. Findings support the offering of credit programs and non-credit courses to develop these competencies.

Poteet, Gaye Willard, *Learner Identified Needs for Continuing Education in Nursing in the Commonwealth of Virginia.* (c/o author, 801 South Adams Street, Petersburg, VA 23803), 1979.

A statewide survey among a stratified sample of 1322 nurses revealed their preferred content, format, location, and level of continuing education activity. Responses were found to be related to the respondent's educational background, employment status, area of practice, and time since graduation. A statewide plan was developed using results of this study.

Pryor, Brandt. *A Study of the Continuing Professional Education Needs of Speech-Language Pathologists and Audiologists.* (c/o author, 116 Illini Hall, 725 Wright Street, Champaigne, ILL 61820), 1979..

The 1,290 pathologists/audiologists responding to this Illinois survey identified topics of highest interest, optimal logistical arrangements, perceived barriers to participation, and motivators of their continued professional education.

Ruhrup, Kenneth R. *Assessment of Faculty and Administrator Staff Development Needs at St. Petersburg Junior College,* (c/o author, P. O. Box 13489, St. Petersburg FL 33733), 1979.

A large portion (231) of the faculty and administrative staff of St. Petersburg Junior College answered a survey to determine their perceptions of needs (of self and others) regarding knowledge and skill development, along with ratings of incentives, leadership environment, and college missions.

St. Louis County Community College. *Survey of Post-Secondary Youth and Adult Learning.* Arlington, VA.: EDRS, 1974, ED 091 019. (MF $.75/HC 4.20)

An adapted version of the ETS adult learning survey (of Hutchins, above) was used in interviews with 847 residents drawn from voter registration lists.

Seegmiller, Jesse F. *The C.E.U. Curriculum: How Can It Fulfill the Needs of Students and Community?* EDRS, 1976, ED 130 691. (MF $.83/HC 1.67)

A study of 4 groups in two counties of eastern Utah: 175 current students, 112 educators, 131 businessmen, and 253 general public. Questions were directed toward interest in the credit classes of the College of Eastern Utah (misleadingly abbreviated "C.E.U.", not to be confused with Continuing Education University), including aspirations toward a degree, convenient times, and type of courses desired.

Selgas, James W. *Community Educational Needs Assessment: Capital Region of Pennsylvania, Research Report 15, Volume 1.* EDRS, 1977, ED 146 992. (MF $.83/HC 11.37)

Harrisburg Area Community College sponsored survey of 185 high school students, 125 adults, and 5 groups of employers, with sample taken from tax rolls. The instrument dealt with content preference, barriers to further learning, employment status, age, level of education, child care needs, reaction to televised instruction, and preferred time and locations for classes.

Smith, Douglas H. "Current and Future Continuing Education Needs of Personnel Adminstrators in Higher Education." Ph.D. dissertation, The Ohio State University, 1974.

A very thorough study of 196 midwest region members of College and University Personnel Association, which inferred educational needs from ratings of perceived importance of specified skill areas and desired areas of professional growth. The questionnaire sought demographic data plus employment history, professional commitment, size of employing institution, professional affiliations, and preferred methods of continuing education.

Stecklein, Helen R. *An Approach to a Market Research Study at a City Community College.* EDRS, 1978, ED 157 564. (MF $.83/HC 3.50)

Project was designed by MBA students at the University of Minnesota on behalf of Minneapolis Metro Community College. Needs of employees were derived from answers of employers of downtown businesses hiring at least 100 persons. Mail surveys were received from 57 employers and 30 personnel adminstrators participated in interviews. The survey asked about company-sponsored programs: cost, level, qualifications of faculty, location, credit, publicity, and enrollment.

Study was incomplete; later phases would have surveyed the employees themselves. Such a questionnaire was developed, (and now shown in report), but never administered.

Report does, however, outline an ideal marketing research plan suitable for firms of 250-5,000 size payroll who are prospective supporters of continuing education.

Waldron, Mark W. *Assessment Study of Part-Time Learning Needs in Guelph*. (c/o author, University of Guelph, Guelph, Onatario, NIG 2WI). 1979.

Two techniques—Nominal Group Technique among ten community clubs, and random mail survey among 441 citizens—were used to measure interest in proposed subject areas of non-credit courses. The study also asked preferred days and times of classes, and needs for supportive services.

Washington, Robert O. and Buffer, Loretta C. *A Model for Conducting Training Needs Assessment Among Service Providers in the Field of Gerontology*. (c/o authors, 1947 College Road, Columbus OH 43210), 1979.

A listing of 72 knowledge and skill competencies were rated as to importance and current mastery by a sample of 254 workers involved in providing services to elderly persons. Findings were compared between administrators and their staffs, and related to levels of professional training and years of service.

Worrick, Roberta. *Identifying Educational Needs, Resources, and Delivery Systems for Maine's Adults*. (c/o author, Coburn Hall, University of Maine, Orono, ME 04469), 1979.

Nearly 1800 randomly-selected citizens were asked about learning interests, perceived barriers, use of radio/TV for entertainment and education, needs for related service, and basic demographic data. The study was conducted through five regional organizations, allowing for some tailoring of questions per special governmental concerns. Five separate regional reports plus a statewide summary were prepared. Data are to be used during the next phase of guide development of delivery systems.

Young, James D. *Results of the Adult Continuing Education Survey Conducted During the 1977 Fall Evening School Semester*. EDRS, 1978, ED 157 572. (MF only, $.83)

Survey of Wisconsin Vocational, Technical, and Adult Education District 1 (around Eau Claire) contacted 1658 current users, 1200 non-users, and 480 past users of continuing education classes. Response rate to first two surveys (done by mail) was 73%. Third survey was done by telephone interview. All three questionnaires asked demographic data, proximity to education opportunities, information sources, tolerated costs and times, and general attitude toward adult education programs. (Copy of survey instruments included.)

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